

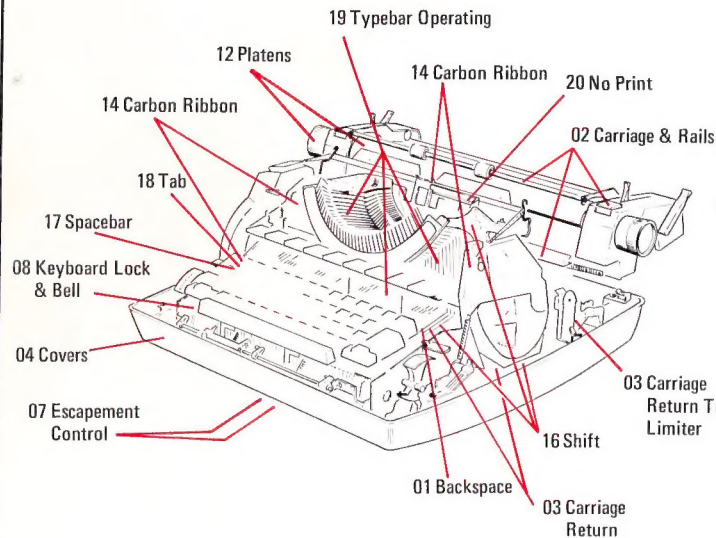
IBM

Typebar Typewriter

Adjustment Parts Manual

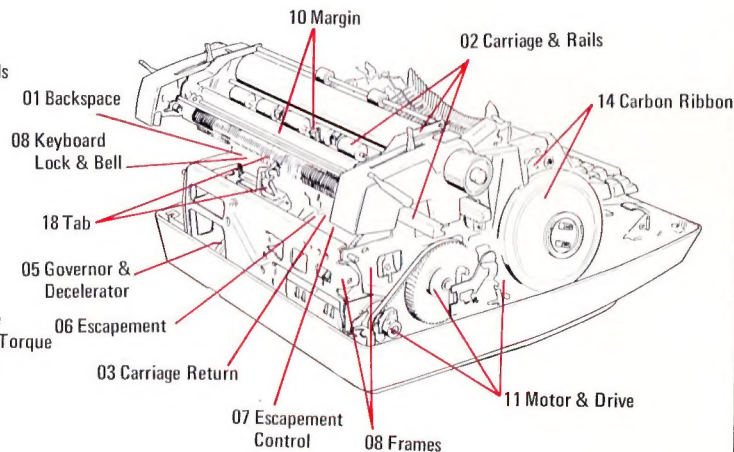
B/m means complete assembly

Model C
Model D



(Front View)

Fabric Ribbon 13
Dual Ribbon 15



(Rear View)

IBM MODEL C & MODEL D TYPEWRITERS

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(Alphabetical)

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PARTS		ADJUSTMENTS	
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This manual is written for both US and World Trade usage. It contains an adjustment section and a parts manual section for the following products:

PRODUCT NAME	ID CODE	PROD. CODE
Model C Typewriter	C1	13
Model C "Executive" Typewriter	C4	13
Model D Typewriter	D1	15
Model D "Executive" Typewriter	D4	15

ADJUSTMENT SECTION

Purpose

This section provides experienced service personnel with a reference for the most commonly used adjustments. Refer to other product service publications if additional information is needed.

Adjustment Identification

The headline of each page shows the product name, identification code, product code and the name of the mechanism covered on that page. Each adjustment is indicated by a black frame number in the top left corner, followed by the adjustment name and mechanism code/reference number. If one frame covers adjustments for more than one product or product level, they are indicated by the identification code and/or the level number. The machine mode, the view of the drawing and safety precautions are also noted when required.

Adjustment Sequence

The frame numbers indicate the sequence of adjustments. One adjustment could affect a following adjustment. Therefore, check all the following adjustments in that mechanism. A red vertical line indicates the end of the mechanism.

Red numbers on the bottom left corner of the frame indicate adjustments out of sequence that could be affected and should be checked.

Adjustment Procedure

The part to be adjusted is colored red and a red arrows shows the direction of movement. Tolerances and/or additional information how to perform the adjustment are shown when required.

Always use the adjustment tolerance shown in the publication with the latest date.

Call Reporting (US Only)

Use the mechanism codes/reference numbers shown after the frame number and frame name for call reporting. The reference number is not always the number of the part that is colored red.

PARTS MANUAL SECTION

Introduction

This section contains parts drawings of mechanisms, reference numbers and other special information. It must be used with a separate part number/price list manual which contains reference numbers, part numbers, part descriptions and prices.

Mechanism Identification

The headline of each page shows the product name, identification code and product code covered on that page. The headline of each frame (two frames per page) shows the mechanism name and the mechanism code covered in that frame. Some frames will show a model identification code after the mechanism name. Some mechanisms require more than one frame. However, each mechanism consists of a group of parts that work together to perform a function.

Part Identification

Red numbers indicate the reference number of a part, a bill of material (B/M) or an assembly.

Red blocks within a frame indicate either one, or a combination of more than one of the following:

- Differences between the models (C1, C4, D1, D4).
- Different levels within the same model, mode or size (level 1, level 2, etc.).
- Field replacement parts.
- Bill of material (B/M) or assemblies (shown with a description — parts shown in the drawing).
- World Trade applications or differences.

If different level(s) exist, which can be used for all models, modes or sizes, only the newest level is shown in the drawing. However, the part number/price list manual will show all level parts.

Some parts are shown for assembly purposes only and do not show a reference number. Replace these parts by ordering either the assembly or a later level part.

Parts Ordering

Locate the mechanism in which the part functions by using the contents page. Note the mechanism code, find the part in the drawing and note the reference number. Use this mechanism code/reference number to locate the part number and price in the part number/price list manual.

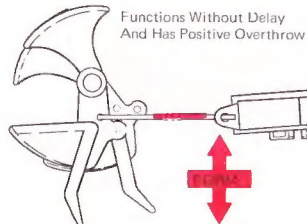
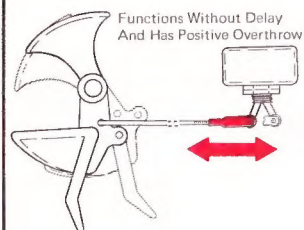
World Trade should use the country's procedures to find the prices.

Features and devices (MESSs) or specification changes (SERs) wished by the customer must be ordered through CE management and branch office sales.

Replacement parts for features, devices and SERs not shown in the parts catalog must also be ordered through CE management and branch office sales.

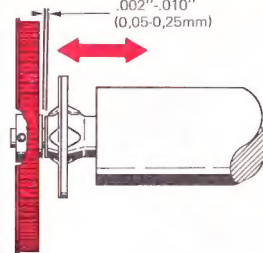
1 On-Off Switch Link (11-117)

(11-122)



2 Power Roll End Play (11-035)

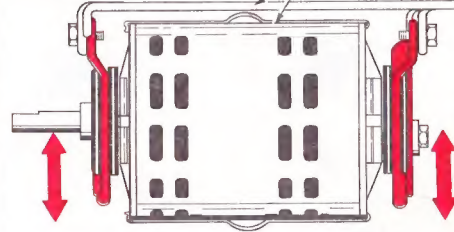
.002"-.010"
(0,05-0,25mm)



3 Motor Mounts, Ring Type

(11-070)

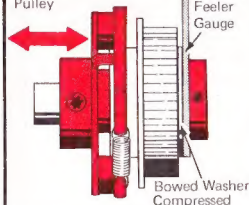
Parallel To Rear Frame (11-071)



4 Motor Clutch Hub and
Motor Clutch Collar (11-097)

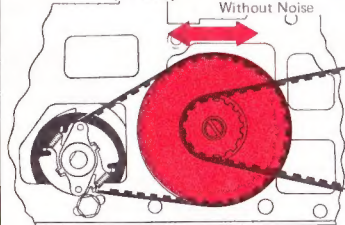
Tracks Evenly On Motor
Pulley & Intermediate
Pulley

.040"
(1,02mm)
Feeler
Gauge



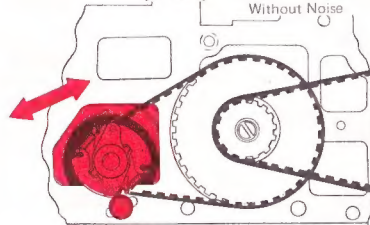
5 Driven Belt & Driven Belt Tension
(11-032)

Maximum Tension
Without Noise



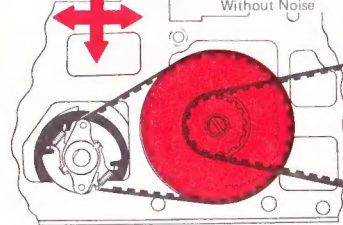
(11-027)

Maximum Tension
Without Noise



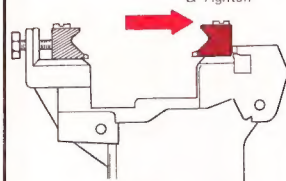
(11-032)

Maximum Tension
Without Noise

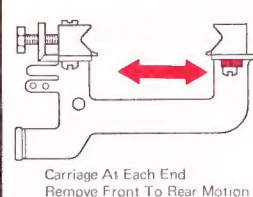


6 Front Rail (02-073)

Move To Front
& Tighten

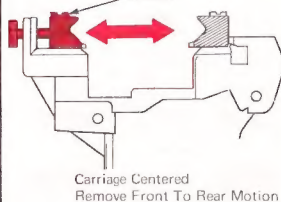


7 Rail Support Eccentrics
(02-074)



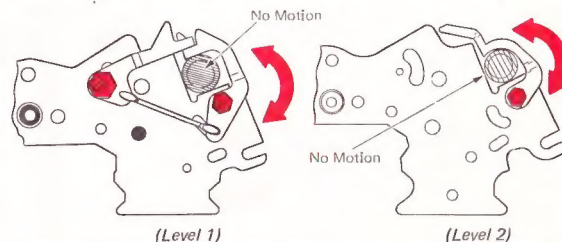
8 Rear Rail Adjusting Screw
(02-091)

Loosen

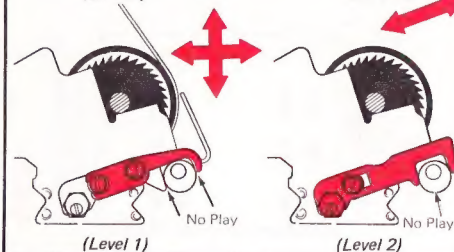


9 Platen Latch Lever Eccentric and Platen Latch Eccentric
(02-372) (02-119)

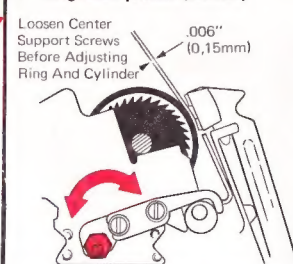
(02-122)



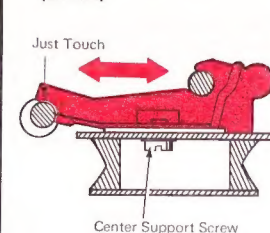
10 Platen Retaining Plate
(02-127)



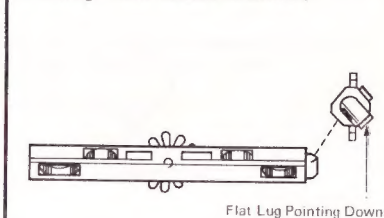
11 Ring and Cylinder (02-124)



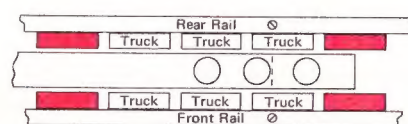
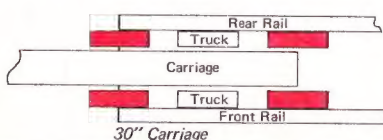
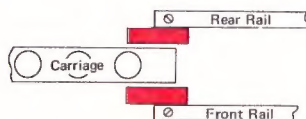
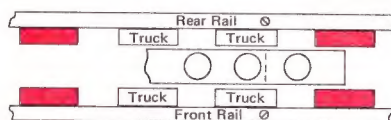
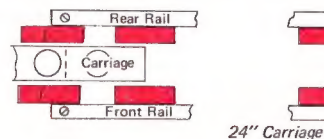
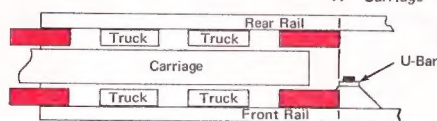
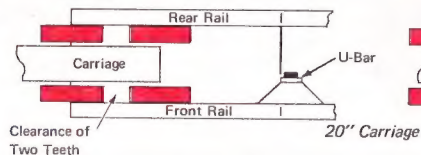
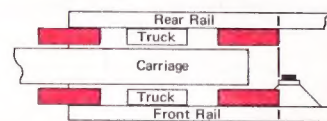
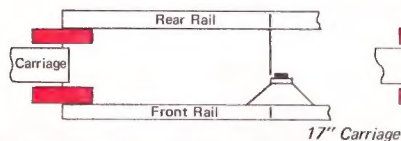
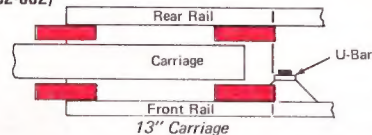
12 Feed Roll Center Supports
(02-134)

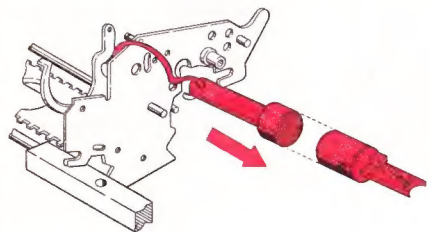


13 Carriage Truck Installation (02-082)



14 Truck Installation (02-082)



15 Mainspring Tension (05-025)

Carriage Pulled From Left To Right

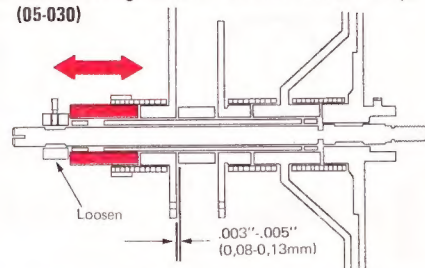
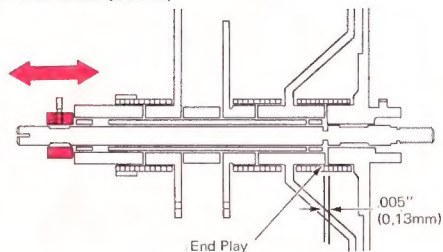
13" Carriage — 3 To 3-1/4 Lbs. At Start To 4-1/4 Lbs. Maximum
1,36 — 1,47 Kg. 1,92 Kg.

17" Carriage — 3 To 3-1/4 Lbs. At Start To 4-1/4 Lbs. Maximum
1,36 — 1,47 Kg. 1,92 Kg.

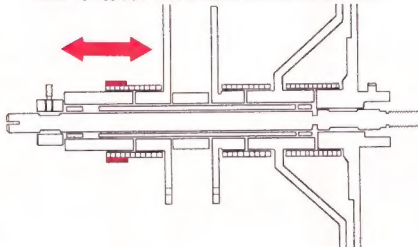
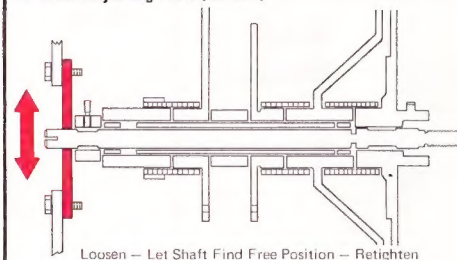
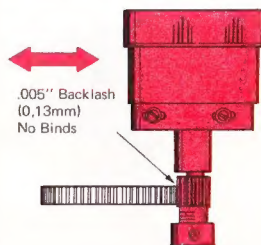
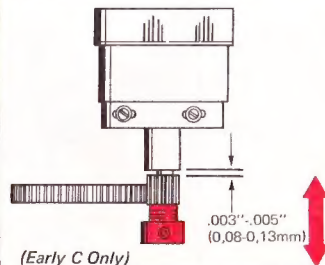
20" Carriage — 3-1/2 To 4 Lbs. At Start To 4-1/4 Lbs. Maximum
1,58 — 1,81 Kg. 1,92 Kg.

24" Carriage — 3-3/4 To 4-1/4 Lbs. At Start To 4-3/4 Lbs. Maximum
1,70 — 1,92 Kg. 2,43 Kg.

30" Carriage — 3-3/4 To 4-1/4 Lbs. At Start To 4-3/4 Lbs. Maximum
1,70 — 1,92 Kg. 2,43 Kg.

16 Tab and Carriage Return Decelerator Arm (End Play) (05-030)**17 End Collar (05-028)****18 Clamp (05-031)**

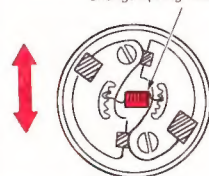
Move To Position That Gives Maximum Deceleration.

**19 Rear Adjusting Plate (05-017)****20 Pinion Gear Mesh (05-006)****21 Pinion Gear Collar (05-003)**

(Early C Only)

22 Carriage Tabulation Speed (05-015)

Change Spring Holes

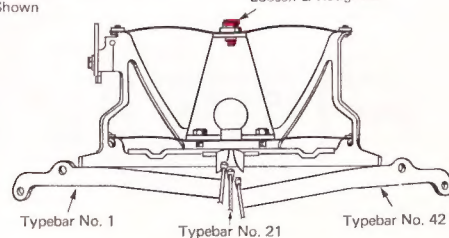


Tab Speed = Carriage Return Speed

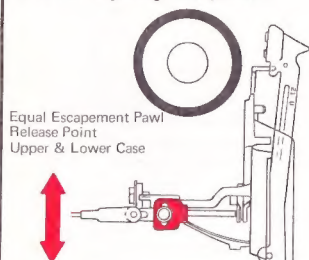
23 U-Bar (Equal Tripping Point, Left, Center and Right) (06-001)

Place Type Bars As Shown

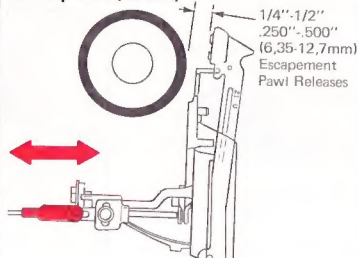
Loosen & Retighten



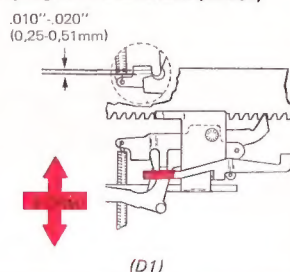
24 U-Bar Adjusting Plate (06-008)



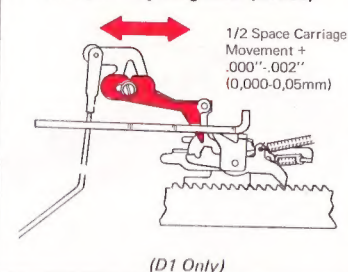
25 Trip Link (06-012)



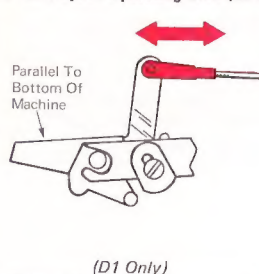
26 Spring Anchor Extension (06-304)



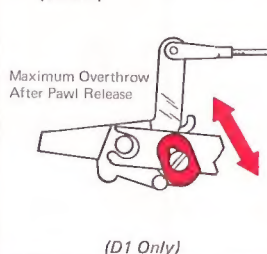
27 Half-Space Adjusting Lever (06-303)



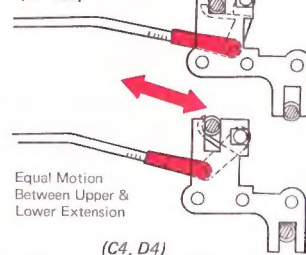
28 Half-Space Operating Link (06-308)



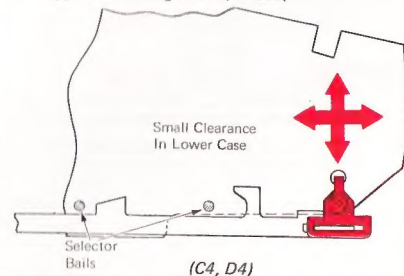
29 Half-Space Flipper Button Stop (19-312)



30 Bail Shaft Link (07-007)

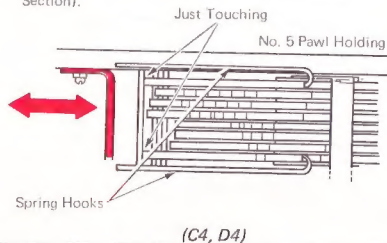


31 Support Mounting Plates (07-005)

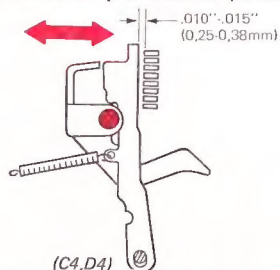


32 Interposer Verticalness (D4-07-215) (C4-07-062)

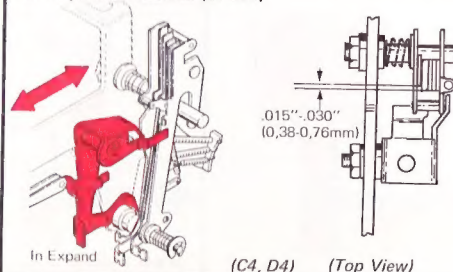
Note: Check Pawl Block Tilt Adj. (See C4-D4 Backspace Section).

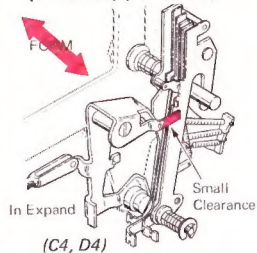
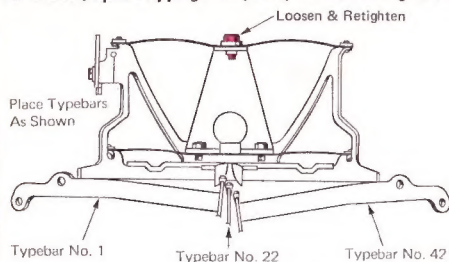
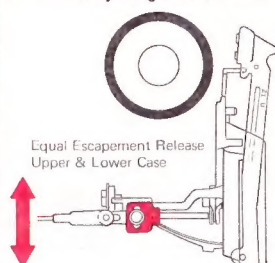
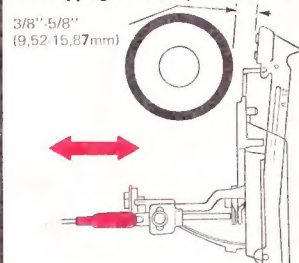
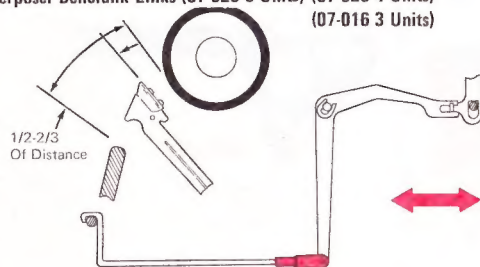
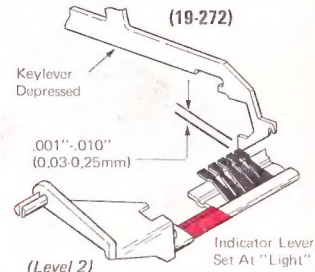
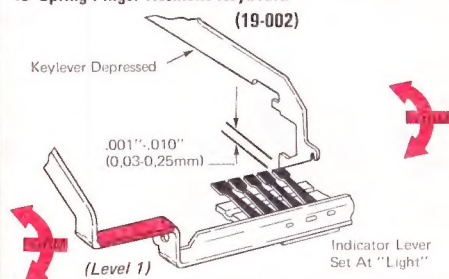
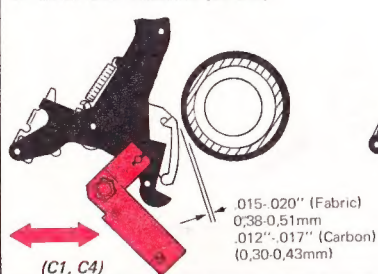
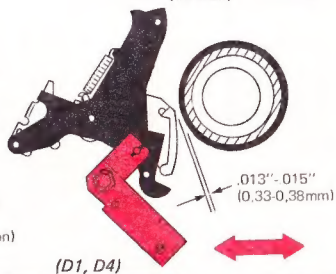
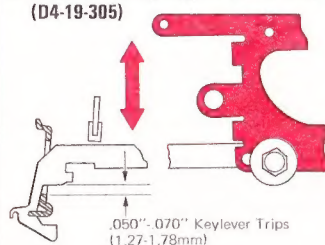
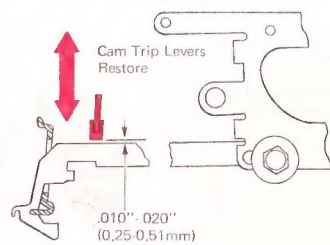


33 Pawl Tail To Interposer Clearance (06-086)

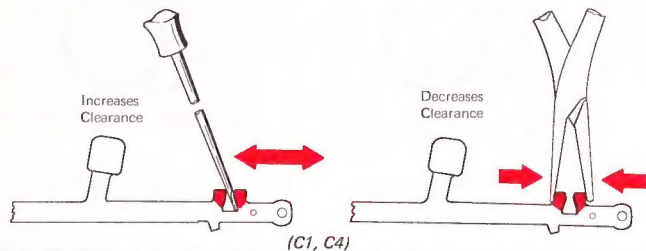


34 Expander Bellcrank (07-051)

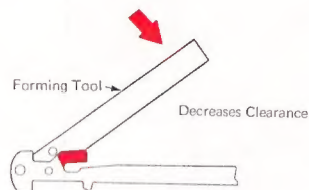
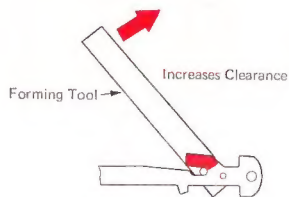


**35 Expand Bellcrank Arm
(C4-07-052) (D4-07-210)****36 U-Bar (Equal Tripping Point, Left, Center and Right) (06-001)****37 U-Bar Adjusting Plate (06-008)****38 Tripping Point (Trip Link) (06-012)****39 Interposer Bellcrank Links (07-026 5 Units) (07-025 4 Units) (07-016 3 Units)****40 Spring Finger Resilient Keyboard (19-002)****41 Letter Cam Clearance (19-049)****(19-229)****42 Keylever Bearing Support (C4-19-069) (D4-19-305)****43 Keylever Upstop (19-346)**

44 Individual Keylever Trip (C 19-015)

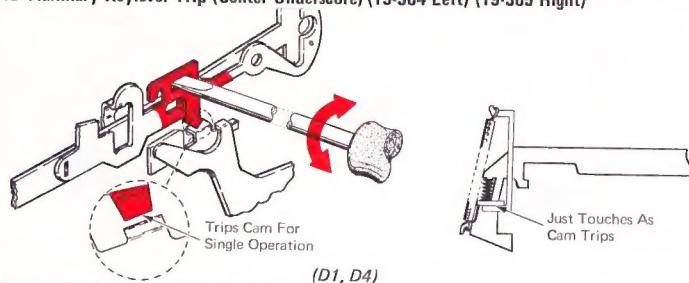


(D 19-329)

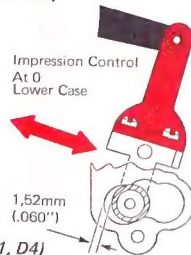


(D1, D4)

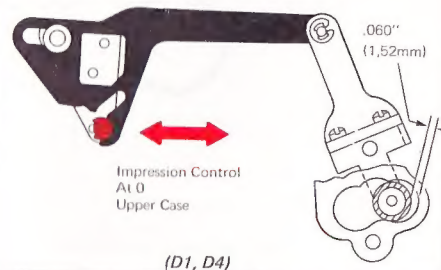
45 Auxiliary Keylever Trip (Center Underscore) (19-364 Left) (19-365 Right)



46 "T" Bar Adjusting Plate (16-160)



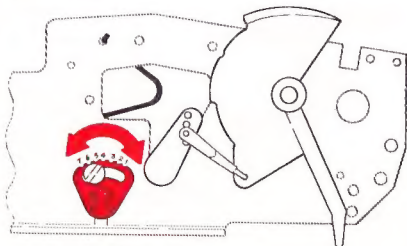
47 Drive Link Adjusting Screw (16-120)



48 Range Matching Plates (19-242)

Set To Specifications On Chart

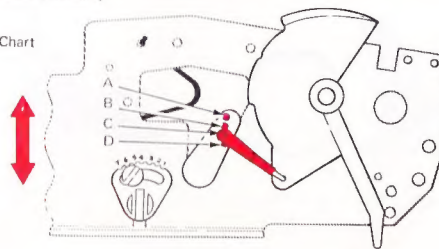
Affects Upper Case Impression Only



49 Impression Control Link (19-267)

Set To Specifications On Chart

Hole A Is Lowest Impression Range,
Hole D Greatest Impression Range



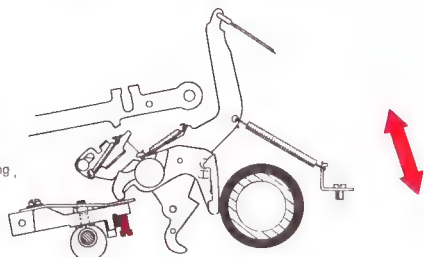
50 K.O. Specification Chart

DUAL K.O. SPECS BY TYPE STYLE							
		Carbon Ribbon		Fabric Ribbon		*Motor Pulley	
Type Code	Name	Imp. Con. Link Pos.	Range Match Pos.	Imp. Con. Link Pos.	Range Match Pos.	Carbon	Fabric
P	Pica	B	5	C	6	15	15
E	Elite	A	4	C	6	14	14
G	Pica Gothic (SC)	A	5	C	5	15	15
H	Pica Gothic	B	5	C	5	15	15
F	Elite Gothic (DC)	B	5	C	5	14	14
GE	Elite Gothic (SC)	B	5	C	5	14	14
L	Modern Gothic	C	5	C	5	15	15
XG	Med. Roman Gothic	C	5	C	5	15	15
B	Large Pica	B	5	C	6	15	15
PO	Bold Face No. 1	C	4	C	7	15	15
ME	Multigraph Elite	A	4	C	5	14	14
DC	Spec. Gothic	A	5	C	5	15	15
BA	Bookface Academic	C	7	C	7	15	15
BE	Cloister Elite	A	4	C	6	14	14
BM	Micro Elite	A	4	B	5	14	14
BP	Great Primer	C	6	B	6	15	15
PS	Secretarial	B	6	C	6	14	15
LE	Large Elite	B	4	C	6	14	14
PM	Ex. Modern	B	7	D	7	14	15
RG	Dual Basic	B	5	C	5	14	14
PE	Ex. Documentary	B	5	C	5	14	15
FD	Micro Gothic (SC)	B	5	C	5	14	14
FF	Micro Gothic (DC)	A	5	B	5	14	14
LB	Large Bookface	D	7	D	7	15	15
FB	El Gothic Bold	B	6	C	6	14	14
PG	Copperplate Gothic	A	5	B	7	15	15
PH	Ex. Text	A	5	C	5	14	14
M	Acctg. Gothic	C	5	D	5	15	15
AP	Pica No. 2	C	7	D	7	15	15
PF	Mid Century	C	6	C	6	14	14
PR	Ex. Charter	C	6	C	6	14	14
S	Sansere	B	5	C	6	World Trade	14
FC	Micro Goth c Condensed	B	5	C	6	14	14
EH	Mercury Elite	B	7	D	6	14	14
PE	Bold Face No. 2	B	5	D	7	15	15
OT	Facsimile Goth. No. 2	C	5	D	5	15	15
PT	Bold Face Italic No. 1	B	7	D	7	15	15
PJ	Ex. Heritage	C	7	D	7	14	15
EC	Signet 11	B	5	C	6	14	14
PN	Ex. Registry	D	7	C	7	15	15
PK	Ex. Directory	D	7	C	7	15	15
B2	Diplomat	O	5	C	5	14	14
EF	Portfolio 11	B	4	C	6	14	14
HV	Ex. Testimonial	C	7	D	7	15	15
H2	Manifold "12"	C	5	D	5	14	14
H3	Manifold "10"	C	5	D	5	15	15
H4	Manifold "9"	D	5	D	5	15	15
H5	Manifold "8"	D	5	D	5	15	15
SE	Pres. Elite	B	5	B	6	14	14
SP	Pres. Pica	C	6	D	7	15	15
JM	Ex. Arcadia	C	7	D	7	14	15
FE	Corinthian Script	C	7	D	7	15	15
G2	Artisan 12	C	6	D	6	14	14
G3	Artisan 10	C	6	D	6	15	15
SM	Courier 10	C	5	D	6	15	15
JG	Copperplate No. 2	B	7	C	7	15	15
JE	Ex. Patron	B	7	C	7	15	15
P2	Pica (Opt. Sensing)	B	5	D	6	14	14
C5	Courier (Opt. Sensing)	C	6	D	6	15	15
VA5	1428 Alphameric	C	6	D	6	15	15
JN	Ex. Registry 2	C	7	D	7	15	15
E4	Elite	B	4	C	5	14	14
SR	Courier 12	B	8	D	8	14	14
PQ	Doric	B	7	D	7	14	15

*14 = 95 ft/min
15 = 103 ft/min

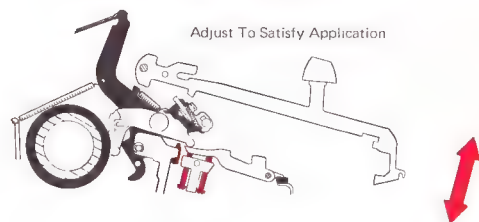
51 Impression (19-030)

With Impression Control
On Position 4
Adjust Screws For Even
Impression Without Embossing.



(C1, C4)

(19-230 Secondary) (19-247 Primary)

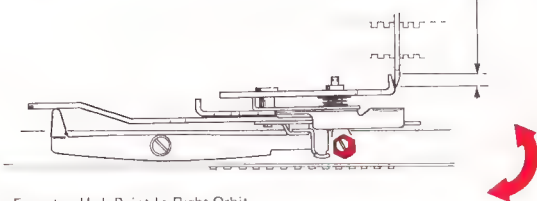


Adjust To Satisfy Application

(D1, D4)

52 Tab Latch Eccentric (18-022)

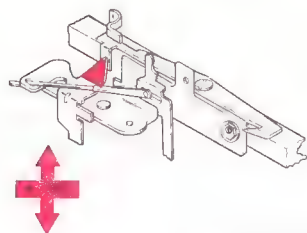
1/2 2/3
Overlap



Note: Eccentric High Point In Right Orbit.

-10- PAWL RELEASE & GROUPING

53 Release and Grouping Lever Rest Position (06-331)



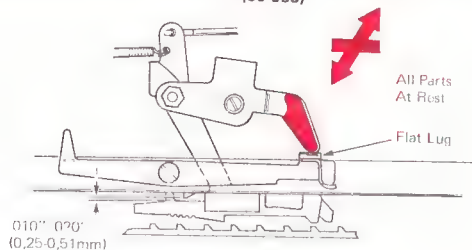
Hold on No. 2 Esc. Pawl
001" 001/2"
(0,03-0,13mm)

Disconnect Pawl Release,
Clutch Unlatch, Auto-Group,
and Aligning Links

(D4-Simplified Pawl Block)

MODEL C1-C4 [13], MODEL D1-D4 [15]

(06-066)



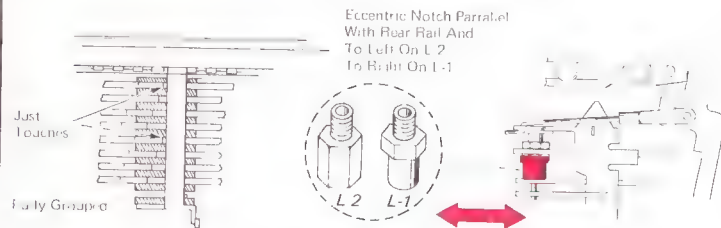
All Parts
At Rest

Flat Lug

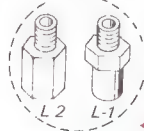
010" 020"
(0,25-0,51mm)

(C4, D4-Presimplified Pawl Block)

54 Grouping Eccentric (06-334)



Eccentric Notch Parallel
With Rear Rail And
To Left On L-2
To Right On L-1



All Links Disconnected

(D4-Simplified Pawl Block)

55 Pawl Release Lever Extension (02-025)

007" 010"
(0,18-0,25mm)

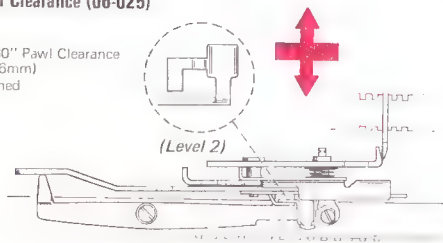


Tab Latched

(C4-Level 2-D4)

56 Pawl Clearance (06-025)

015" 030" Pawl Clearance
(0,38-0,76mm)
Tab Latched

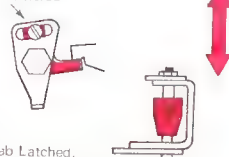


(Level 2)

(C4-D4)

57 Grouping Cone (Preliminary) (06-064)

Preliminary
Latch Centered

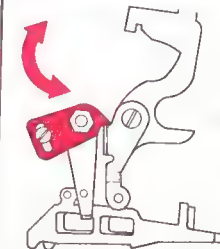


Tab Latched,
Grouping Latch Drops
in Without Touching

(C4, D4-Presimplified Pawl Block)

58 Grouping Lever (06-094)

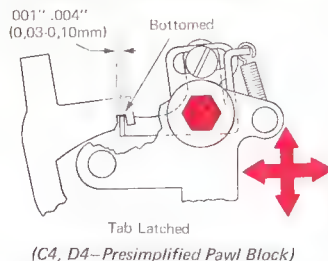
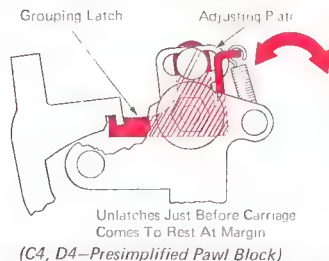
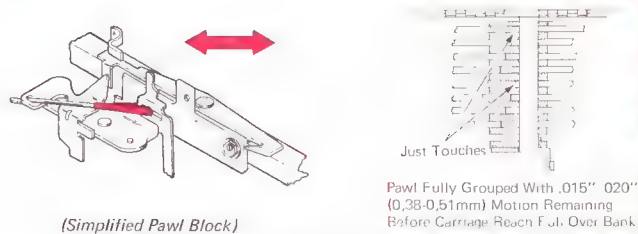
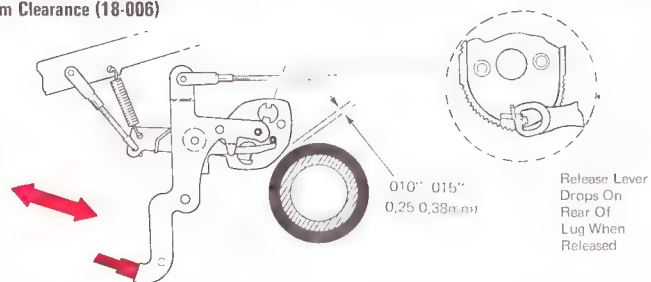
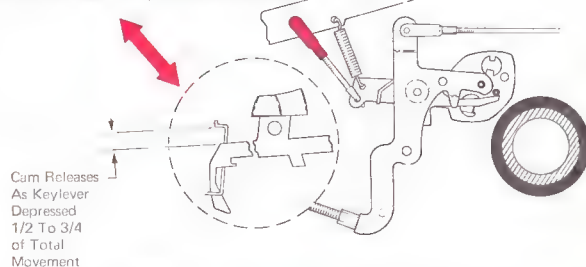
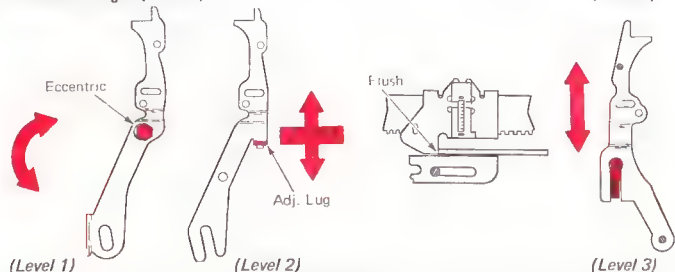
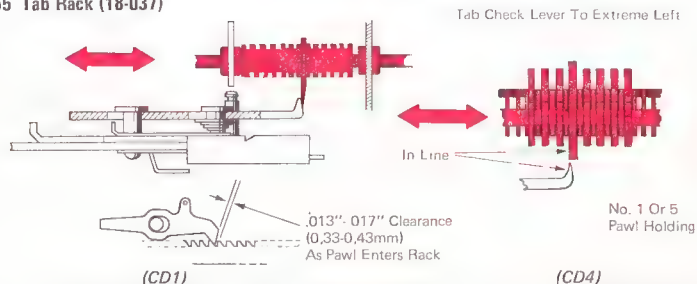
Disconnect Grouping Latch
Spring & Pawl Aligning Link



Just Touches

Tab Latched,
Paws Grouped

(C4, D4-Presimplified Pawl Block)

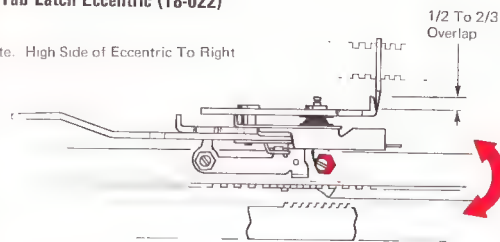
59 Grouping Latch Mounting Stud (06-100)**60 Grouping Latch Adjusting Plate (06-103)****61 Automatic Grouping Link (06-337)****62 Cam Clearance (18-006)****63 Cam Release Link (C18-008) (D18-102)****64 Tab Lever Height (18-014)****65 Tab Rack (18-037)**

-12- TABULATION

MODEL C1-C4 [13], MODEL D1-D4 [15]

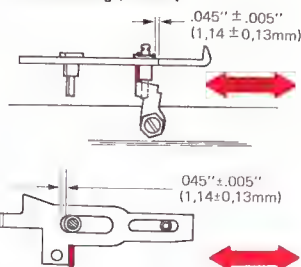
66 Tab Latch Eccentric (18-022)

Note: High Side of Eccentric To Right

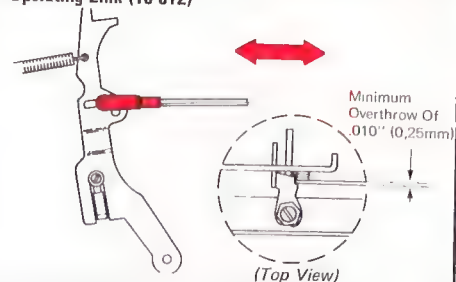


57 58, 59, 60, & 61

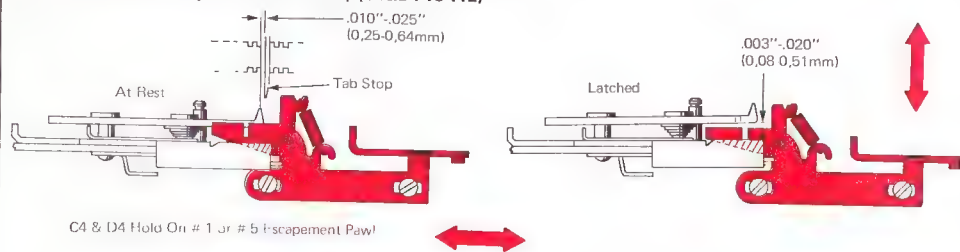
67 Tab Unlatching (18-020)



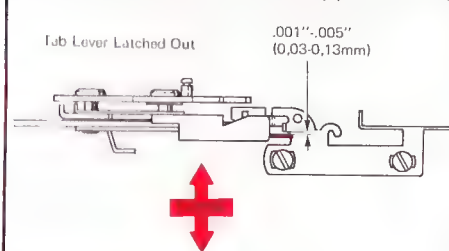
68 Operating Link (18-012)



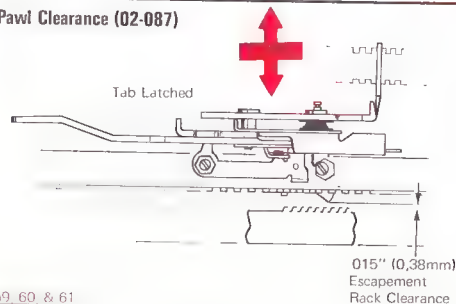
69 Tab Check Lever Keeper (C1&D1 18-027) (C4&D4 18-112)



70 Tab Lever Extension (C1&D1 18-060) (C4&D4 18-109)

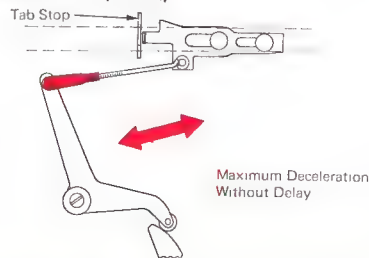


71 Pawl Clearance (02-087)

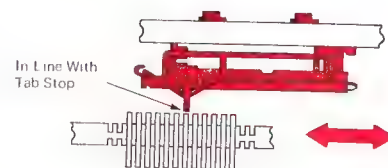


58 59 60 & 61

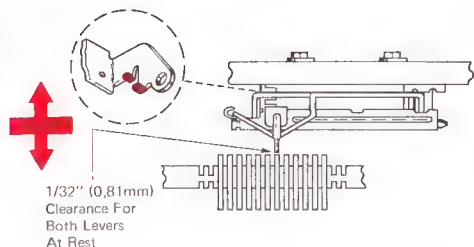
72 Decelerator Link (18-032)



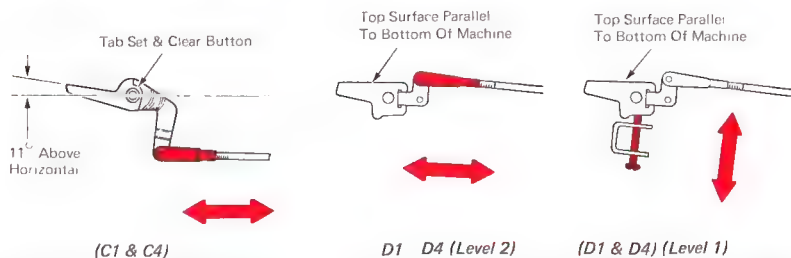
73 Tab Set & Clear Bracket (C1 & D1 18-066) (C4 & D4 18-081)



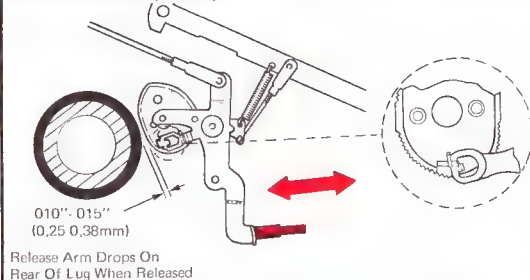
74 Tab Set & Clear Levers (C1 & D1 18-066) (C4 & D4 18-081)



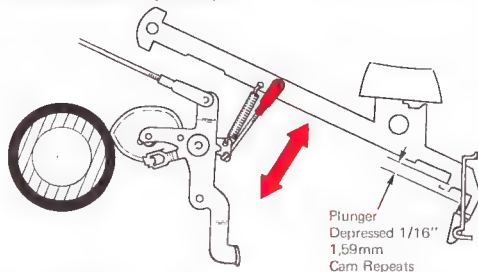
75 Tab Set & Clear Link Clevis (18-051)



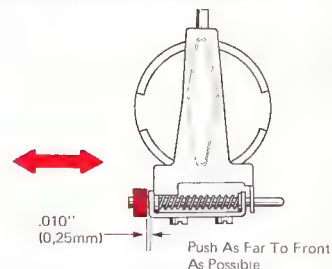
76 Cam Clearance (03-052)



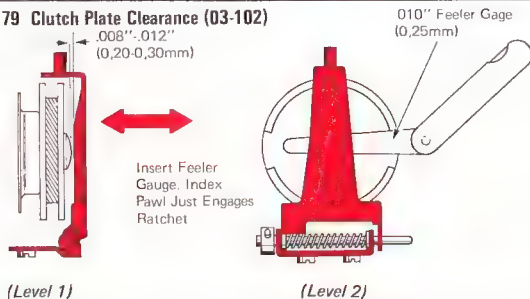
77 Cam Release Link (03-048)



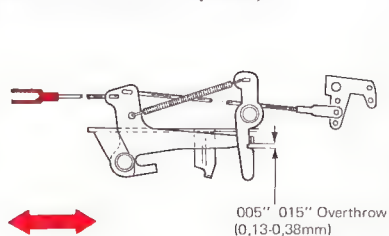
78 Clutch Lever Bolt Collar (03-125)



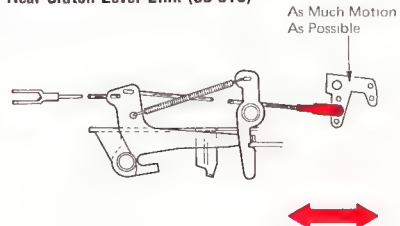
79 Clutch Plate Clearance (03-102)



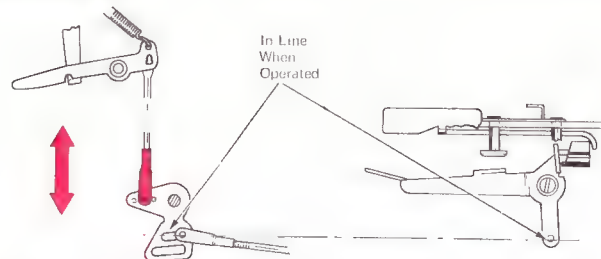
80 Front Clutch Lever Link (03-045)



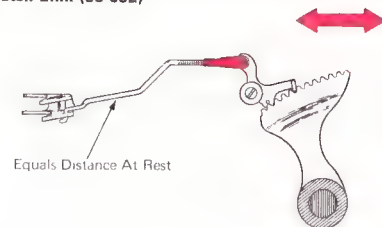
81 Rear Clutch Lever Link (03-015)



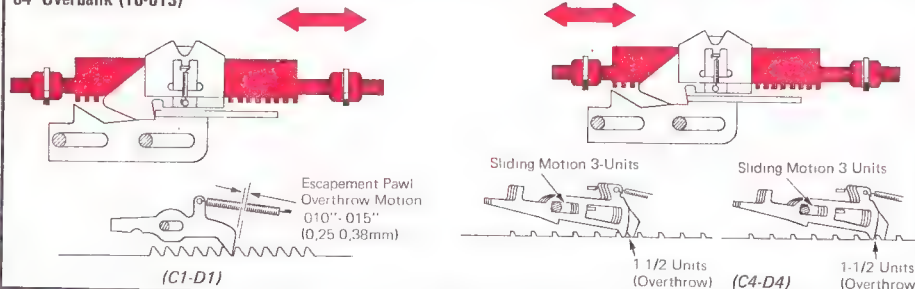
82 Clutch Latch Link (03-037)



83 Decelerator Latch Link (03-092)

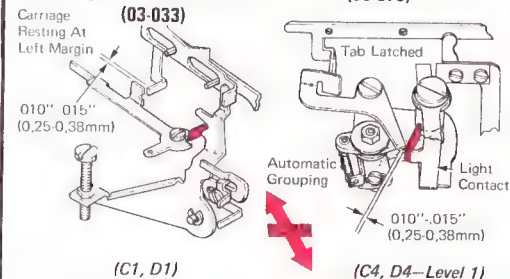


84 Overbank (10-013)

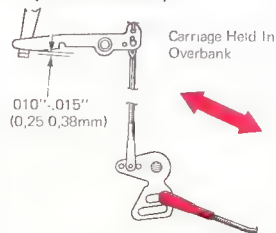


85 Carriage Return/Tab Interlock (03-033)

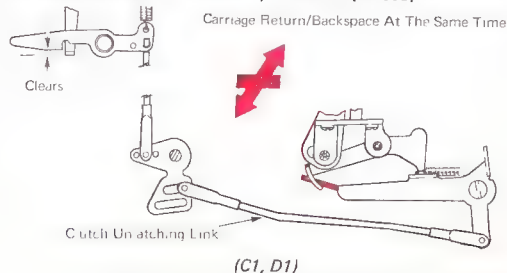
(06-078)



86 Clutch Unlatching Link (C1 & D1 03-034) (C4 & D4 03-082)



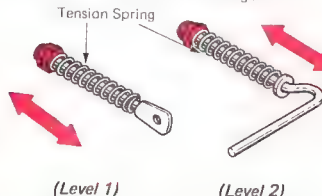
87 Carriage Return/Tab Interlock, Extension (03-033)



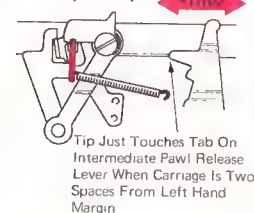
88 Clutch Tension Spring (03-009)

(03-101)

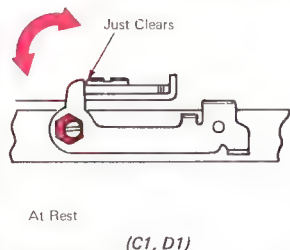
- With the line spacing lever in triple index position, adjust the tension nut for positive return 1½" from the left hand margin



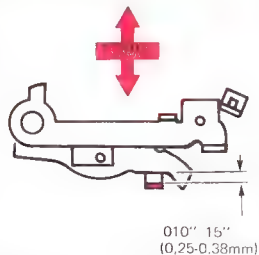
89 Intermediate Pawl Release Lever (03-042)



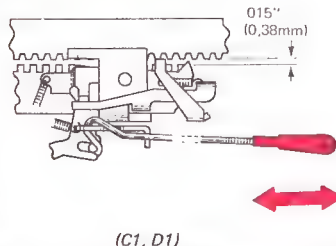
90 Pawl Release Lever Eccentric (02-087)



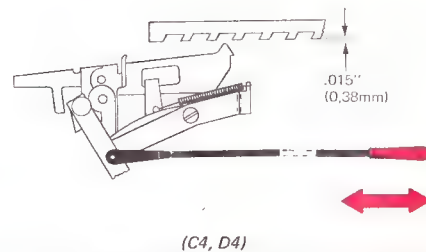
91 Pawl Release Lever (02-087)



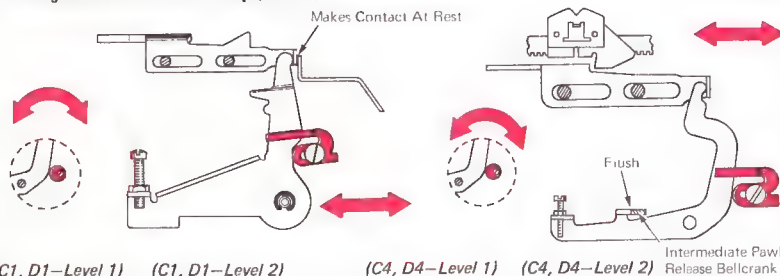
92 Pawl Clearance Link (03-036)



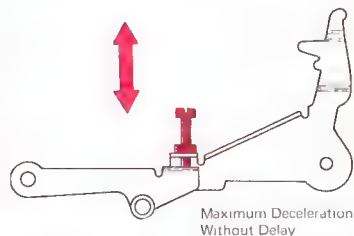
(03-088)



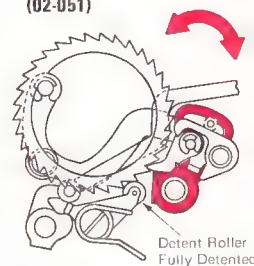
93 Margin Control Bellcrank Stop (03-069)



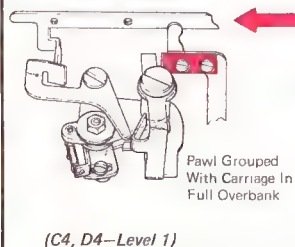
94 Decelerator Arm (03-030)



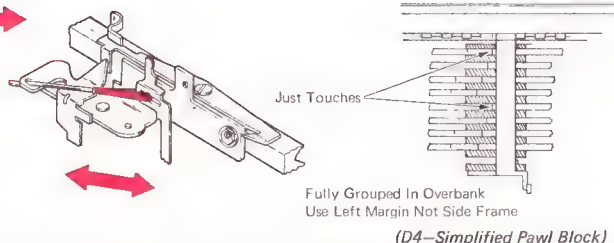
95 Lower Index Pawl Stop (02-051)



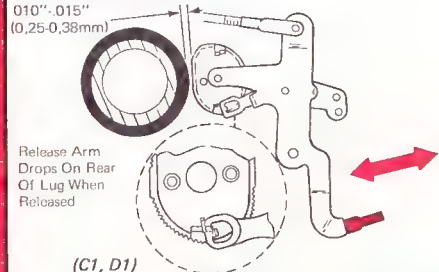
96 Margin Control Plate And Link (03-084)



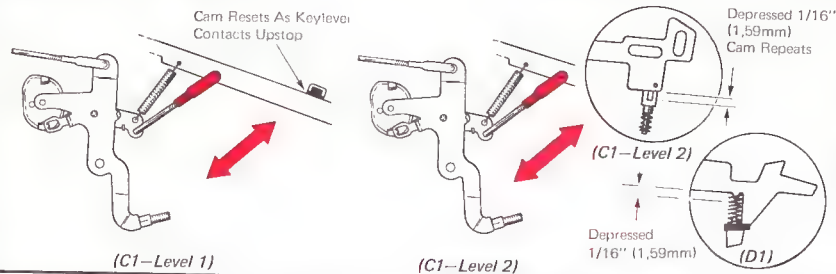
(06-337)



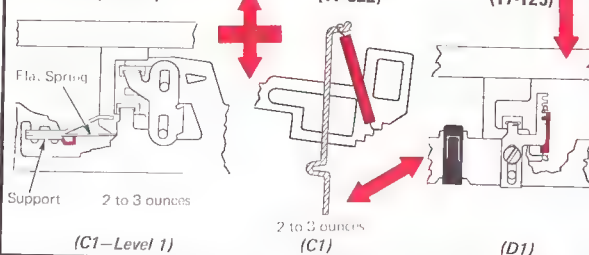
97 Cam Clearance (17-005)



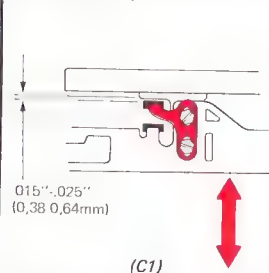
98 Cam Release Link (17-029)



99 Spacebar Spring Return Support (17-016)



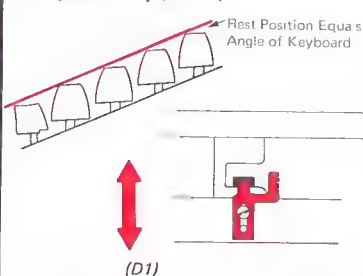
100 Repeat Stop (17-124)



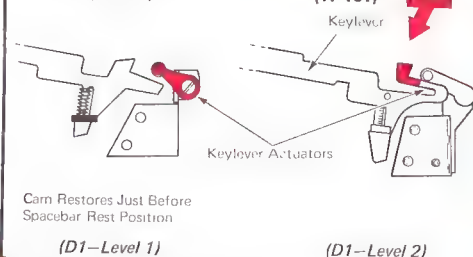
101 Operating Link (17-002)



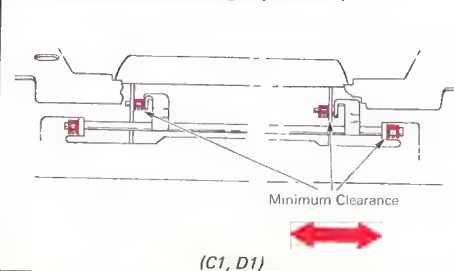
102 Spacebar Stop (17-124)



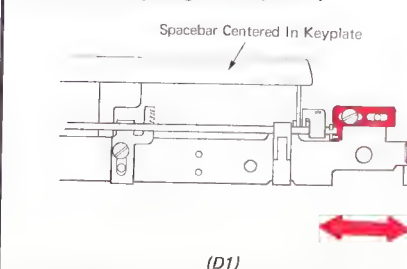
103 Spacebar Keylever Actuator (17-118)



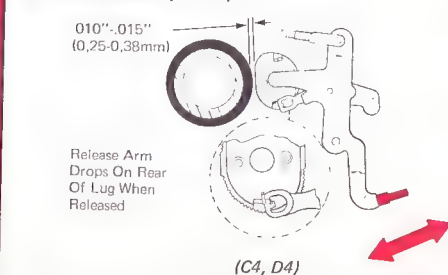
104 Spacebar Shaft Retaining Clips (17-114)



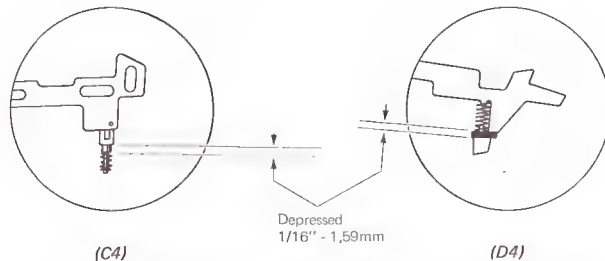
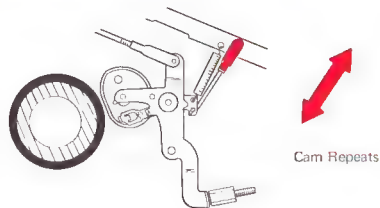
105 Spacebar Adjusting Bracket (18-131)



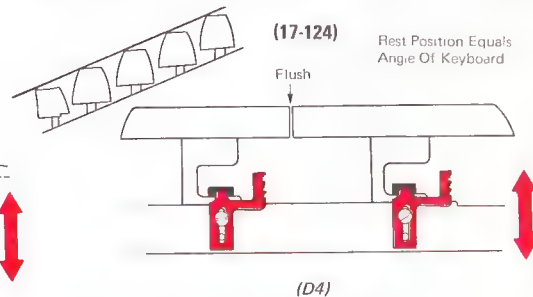
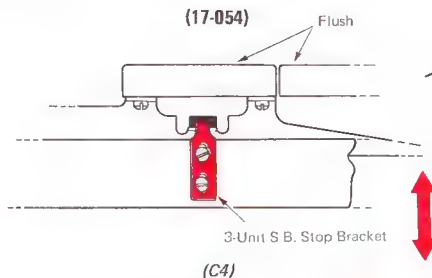
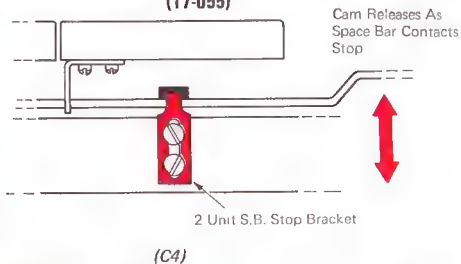
106 Cam Clearance (17-005)



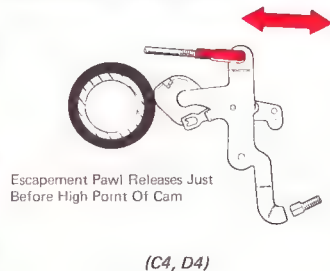
107 Cam Release Link (17-029)



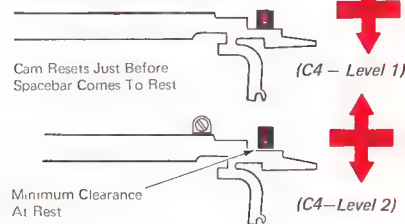
108 Two- & Three-unit Spacebar Upstop (17-055)



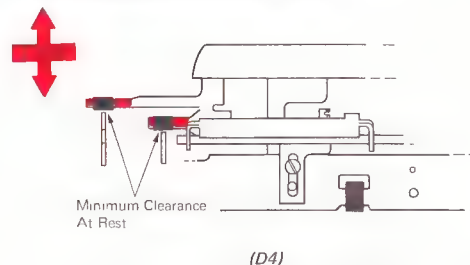
109 Operating Link (17-002)



110 Three-unit Spacebar Extension (17-047)



111 Three-unit Spacebar Extensions (17-230)

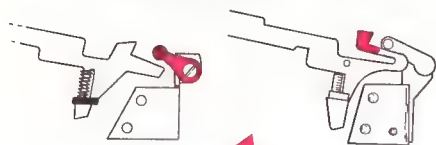


112 Two-unit Spacebar Keylever Actuator

(17-118)

Cam Resets Just Before
Space Bar Rest Position

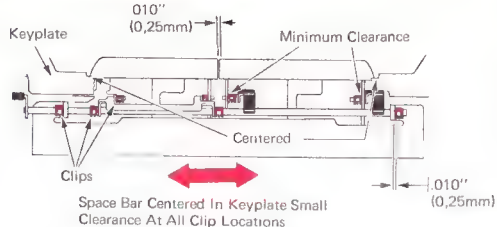
(17-101)



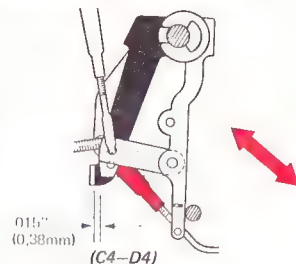
(D4—Level 1)

(D4—Level 2)

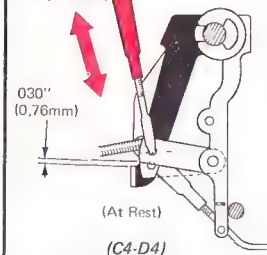
113 Spacebar Retaining Clips (17-114)



114 Actuating Lever Link (17-036)

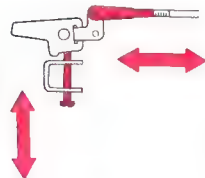


115 Spacebar Interposer Link (17-063)



116 Space Expand Flipper Button (07-206)

Link Equals Distance At Rest



(D4—Level 1)

(07-208)



Parallel To Bottom Of Machine

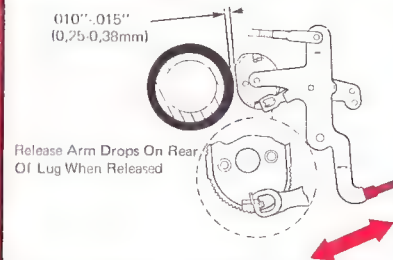
(D4—Level 2)

117 Space Expand Lever (Extension) (17-227)

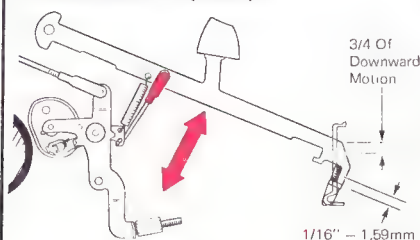


(D4)

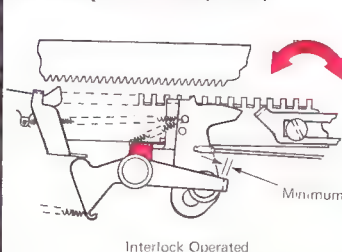
118 Cam Clearance (01-006)



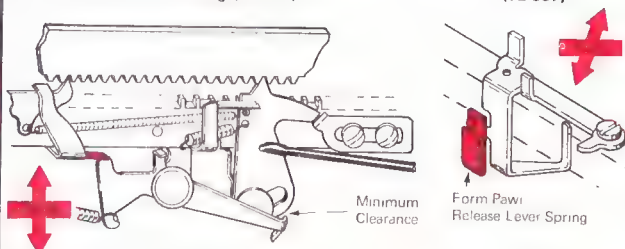
119 Cam Release Link (01-004)



120 Backspace Interlock (01-017)



121 Pawl Release Lever Lug (01-017)



(02-087)

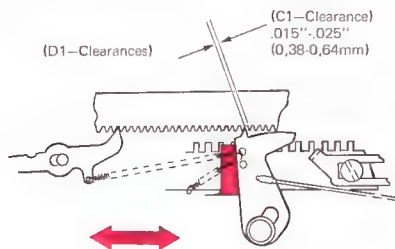
(Level 1)

(Level 2)

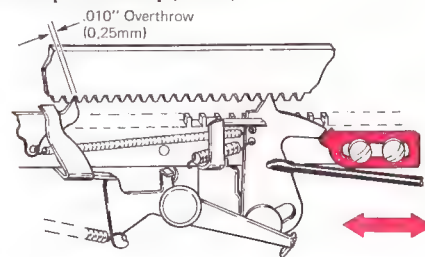
122 Backspace Pawl Guide Lug (01-017)

PITCH CLEARANCE (D 1)

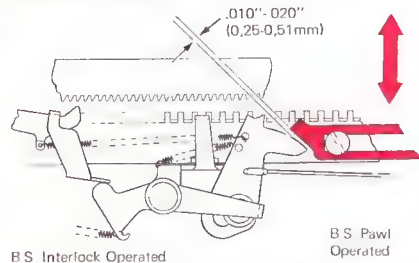
6 2/5	.010"-.020"	0.25-0.51mm
8	.010"-.020"	0.25-0.51mm
9	.010"-.020"	0.25-0.51mm
10	.010"-.020"	0.25-0.51mm
11	.008"-.014"	0.20-0.36mm
12	.008"-.014"	0.20-0.36mm
14	.008"-.012"	0.20-0.30mm



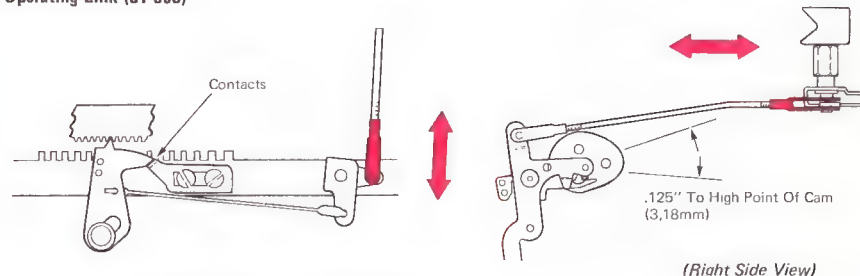
123 Backspace Pawl Stop (01-021)



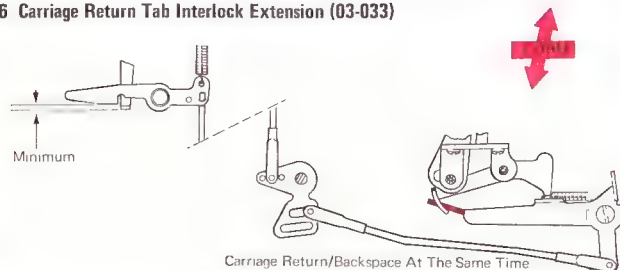
124 Backspace Pawl Stop (01-021)



125 Operating Link (01-008)

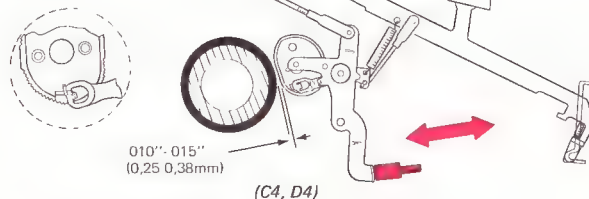


126 Carriage Return Tab Interlock Extension (03-033)

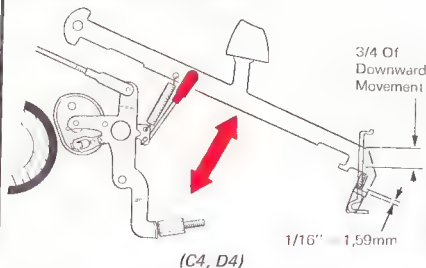


127 Cam Clearance (01-006)

Release Arm Drops On Rear Of Lug When Released

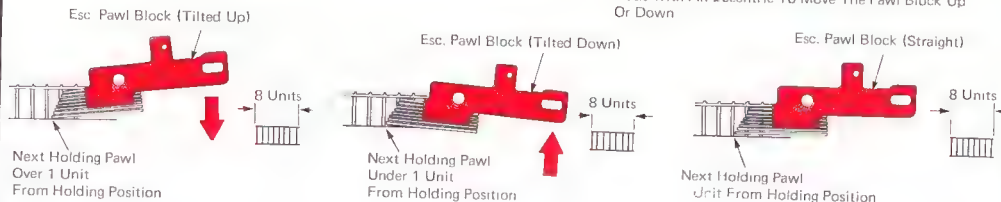


128 Cam Release Link (01-004)



(C4, D4)

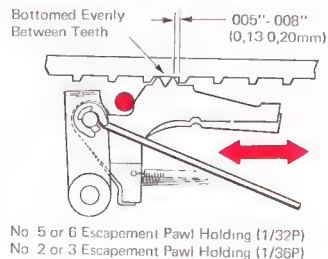
129 Pawl Block Tilt (06-070 Presimplified P.B.) (06-336 Simplified P.B.)



Level II Same As Level I Except The Adjustment Is Made With An Eccentric To Move The Pawl Block Up Or Down

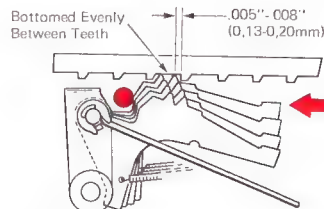
(Level 1)

130 Backspace Guide Pin Bracket (01-008)



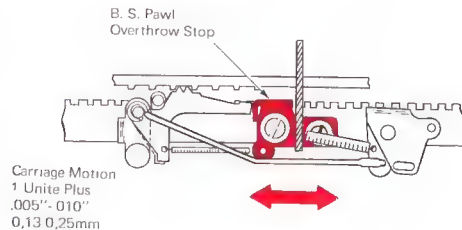
No 5 or 6 Escapement Pawl Holding (1/32P)
No 2 or 3 Escapement Pawl Holding (1/36P)

(C4, D4)



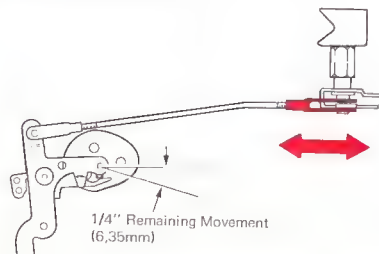
No 8 or 1 Escapement Pawl Holding (1/32P)
No. 7 or 8 Escapement Pawl Holding (1/36P)

131 Backspace Pawl Stop (01-045)

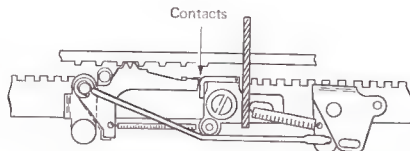


(C4, D4)

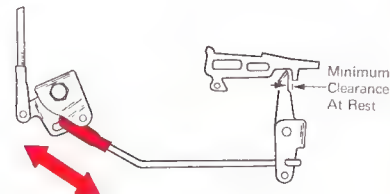
132 Operating Link (01-008)



(C4, D4)

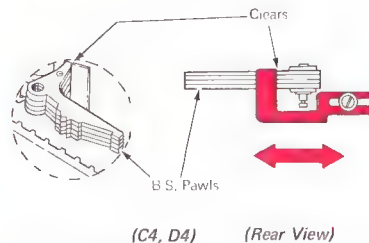


133 Aligning Link (01-042)



(C4, D4)

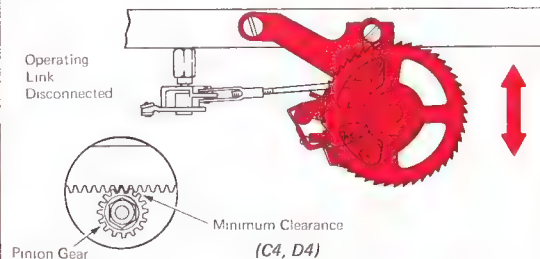
134 Backspace Interlock (01-051)



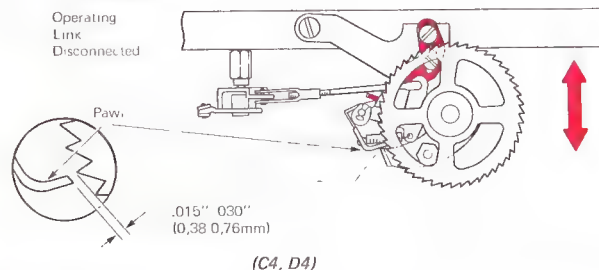
135 Backspace Rack (01-093)



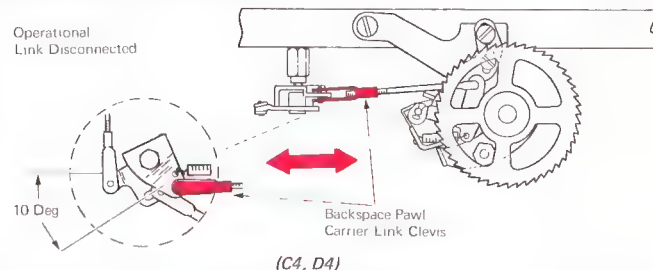
136 Backspace Pinion Gear (01-082)



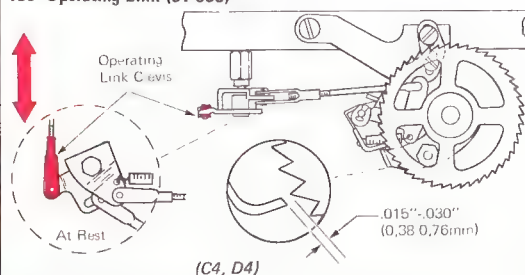
137 Upper Stop (01-080)



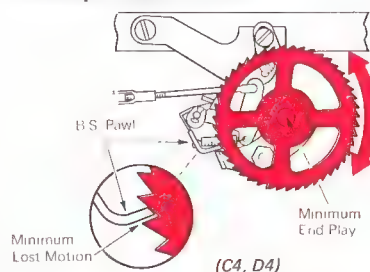
138 Backspace Pawl Carrier Link (01-075)



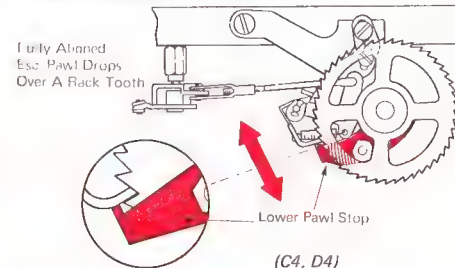
139 Operating Link (01-008)



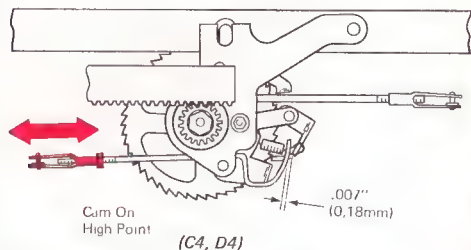
140 Backspace Ratchet (01-070)



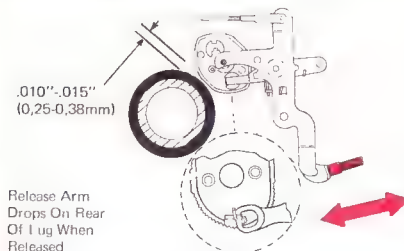
141 Lower Pawl Stop (01-078)



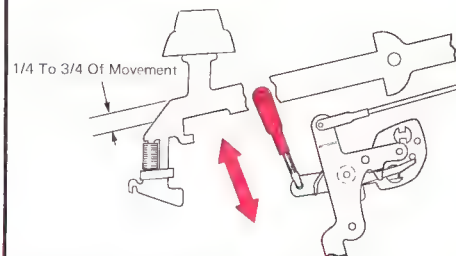
142 Backspace Interlock Link (01-085)



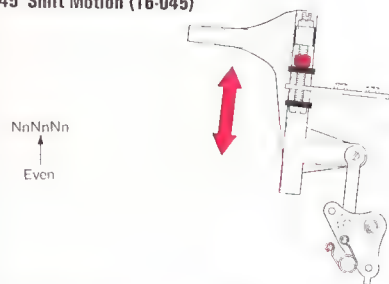
143 Cam Clearance (16-076)



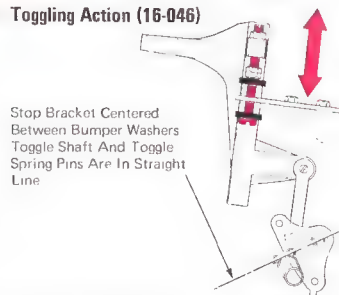
144 Cam Release Link (16-016)



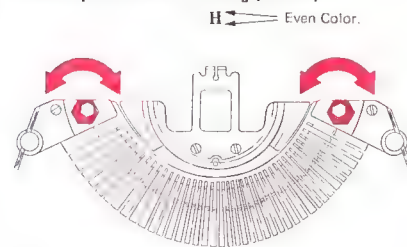
145 Shift Motion (16-045)



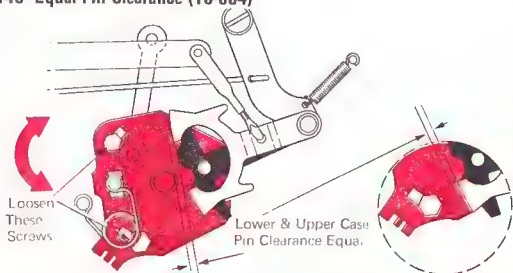
146 Toggling Action (16-046)



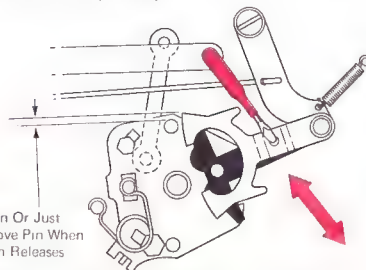
147 Even Top and Bottom Printing (19-083)



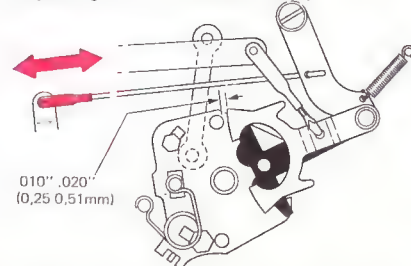
148 Equal Pin Clearance (16-004)



149 Pusher Link (16-016)

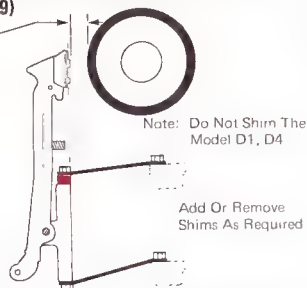


150 Operating Link (C 16-018) (D 16-157)

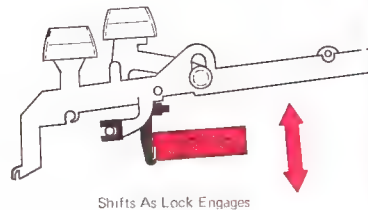


151 Shifting Off (16-029)

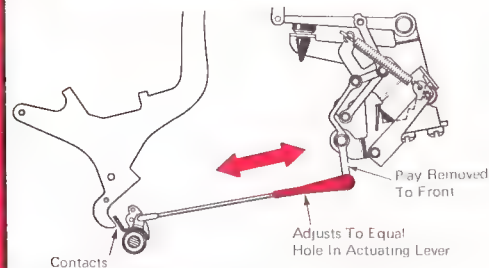
.0045"-.0065"
(0,12-0,17mm)
.007"-.010" (Carbon)
(0,18-0,25mm)



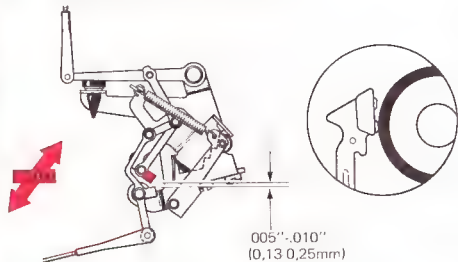
152 Shift Lock (16-066)



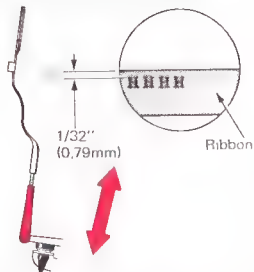
153 Ribbon Lift Operating Link (14-050)



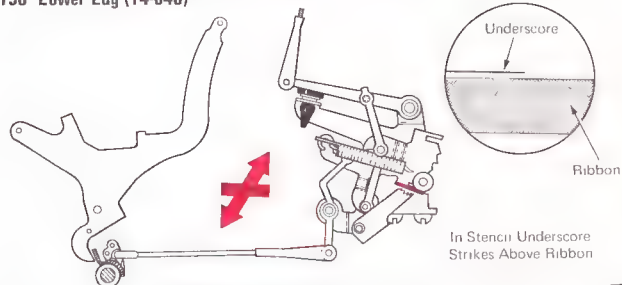
154 Toggle Plate Stop Lug (14-048)



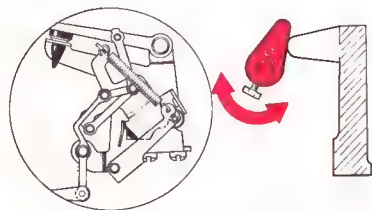
155 Ribbon Lift Guide (14-043)



156 Lower Lug (14-048)

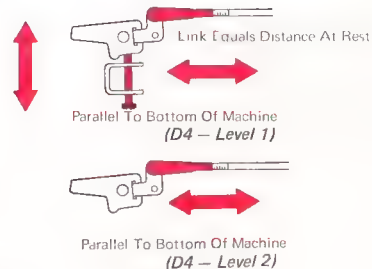
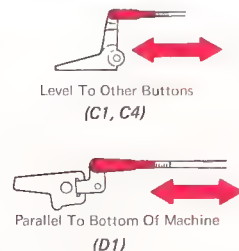


157 Ribbon Control Lever Stop (14-045)



Adjust To Limit To First Lift Position.

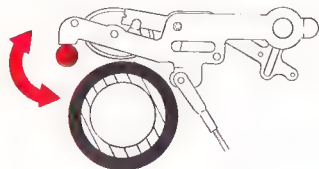
158 Ribbon Position Operating Link (14-365)



-24- CARBON RIBBON

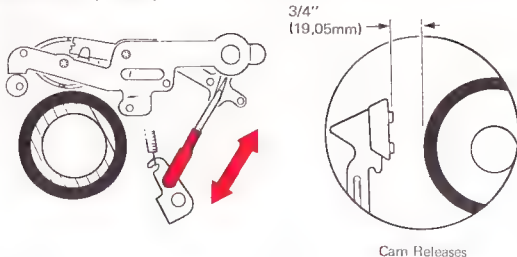
MODEL C1-C4 [13] , MODEL D1-D4 [15]

159 Cam Clearance (14-113)



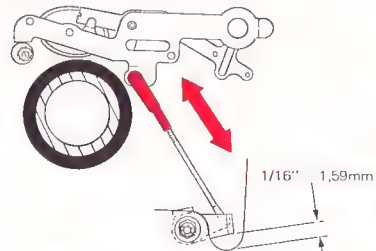
Release Lever Drops On Rear Of Cam Lug When Released

160 Cam Release Link (14-097)



Cam Releases

161 Cam Operating Link (14-105)

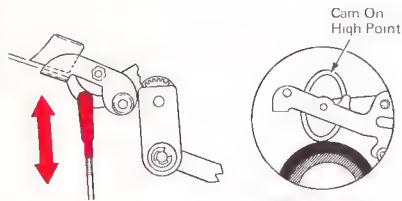


162 Feed Link (14-106)

(14-215)

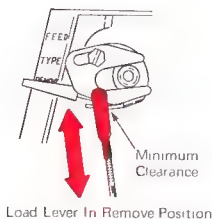
(14-178)

163 Cam Connecting Link (14-161)



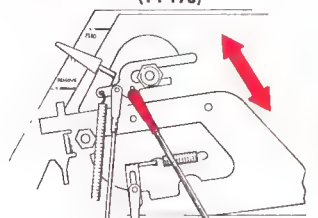
Releases Without Choking Off

(C1, C4 - Level 1)

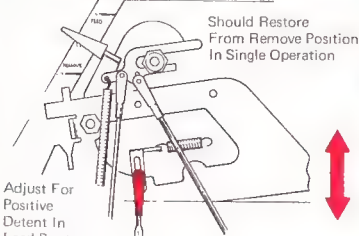


Load Lever In Remove Position

(C1, D1 - Level 2)

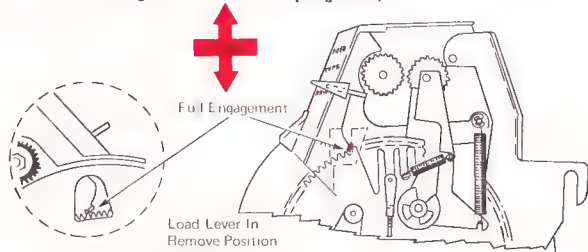


(D1, D4 - Spring Drive)



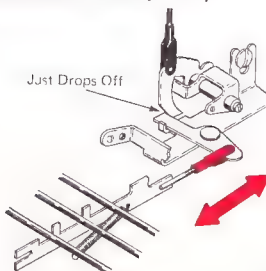
(D1, D4 - Spring Drive)

164 Reload Lever Lug (14-286) (14-156 Spring Drive)

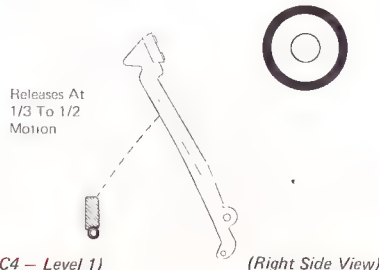


(Level 2)

165 Selector Bar Link (14-001)

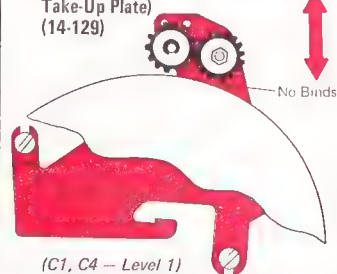


(C1, C4 - Level 1)

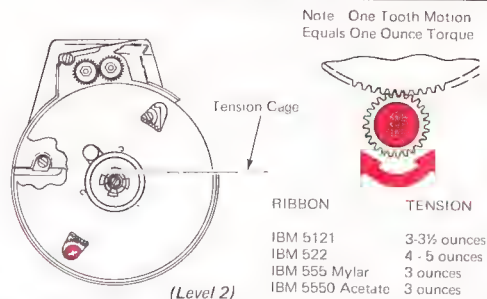
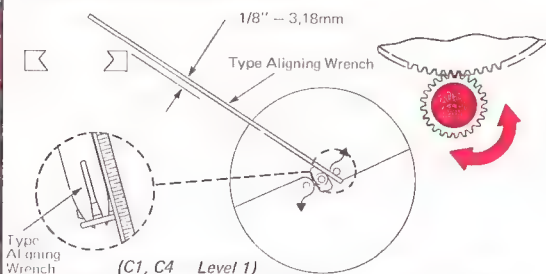


(Right Side View)

174 Upper Mounting Plate (Two-Piece Take-Up Plate) (14-129)



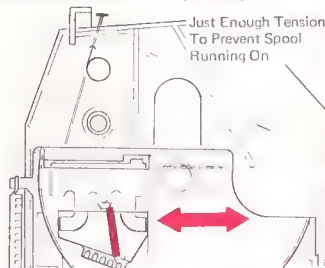
175 Take-Up Drive Tension (14-126)



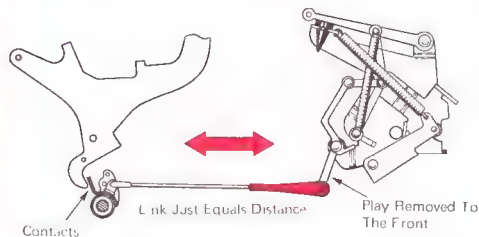
Note One Tooth Motion Equals One Ounce Torque

RIBBON	TENSION
IBM 5121	3-3½ ounces
IBM 522	4 - 5 ounces
IBM 555 Mylar	3 ounces
IBM 5550 Acetate	3 ounces

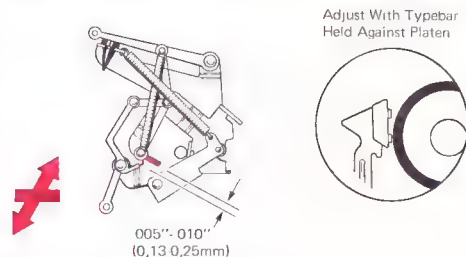
176 Ribbon Friction Lever (14-302)



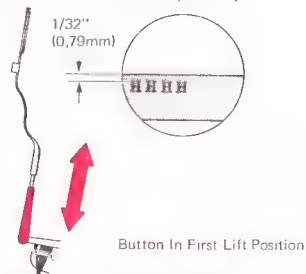
177 Ribbon Lift Operating Link (13-133)



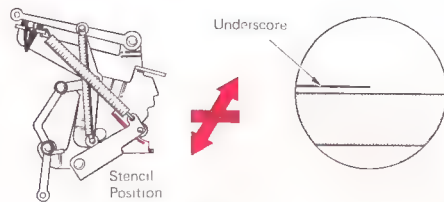
178 Toggle Plate Stop Lug (13-127)



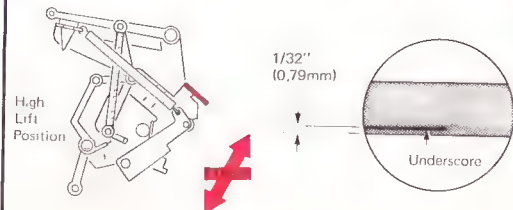
179 Ribbon Lift Guide (13-137)



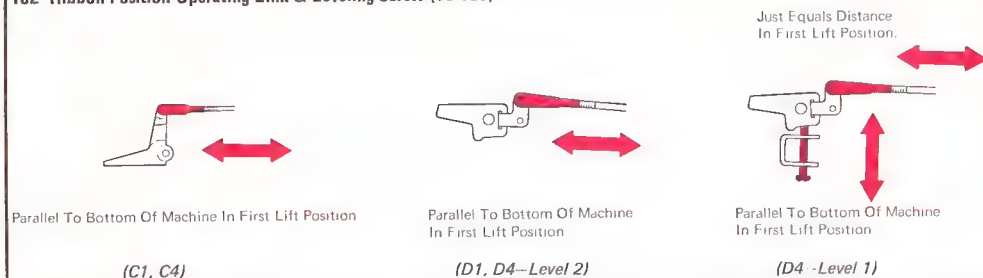
180 Positioning Plate (Lower Lug) (13-127)



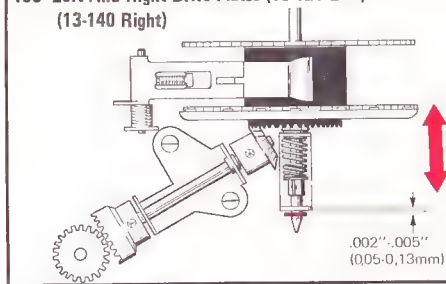
181 Positioning Plate (Upper Lug) (13-127)



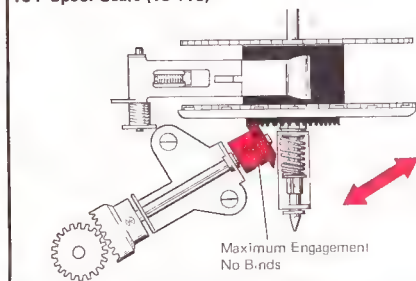
182 Ribbon Position Operating Link & Leveling Screw (13-130)



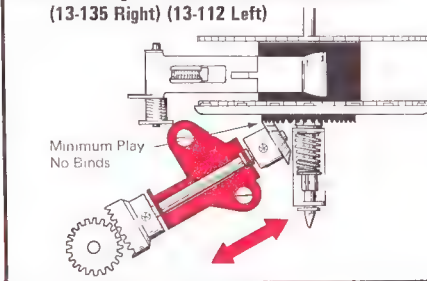
183 Left And Right Drive Plates (13-121 Left) (13-140 Right)



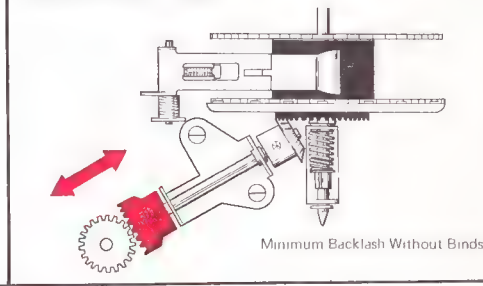
184 Spool Gears (13-115)



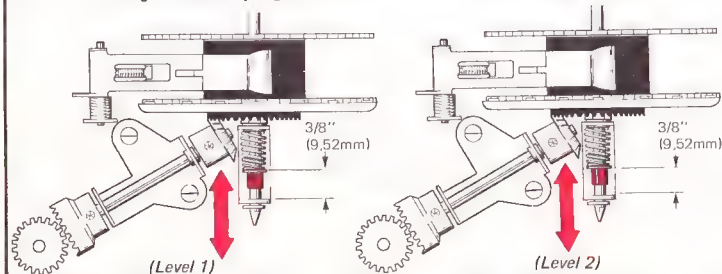
185 Left & Right Driven Shaft Mounting Brackets (13-135 Right) (13-112 Left)



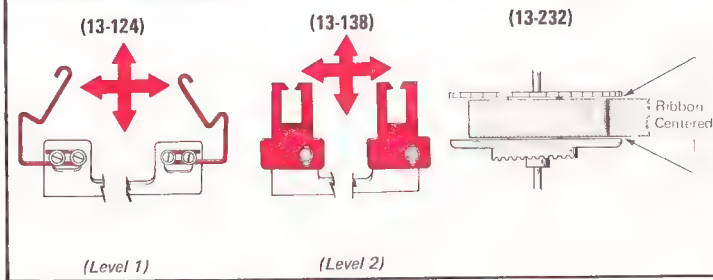
186 Driven Fears (13-108)



187 Left And Right Tension Spring (13-093)



188 Ribbon Corner Guides



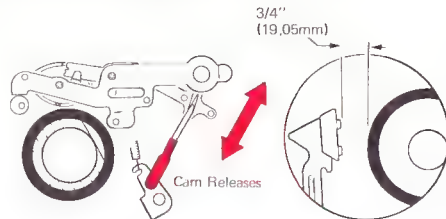
189 Cam Clearance (13-019)



With The Cam Released, The Release Lever Will Rest On The Rear Half Of The Cam Lug

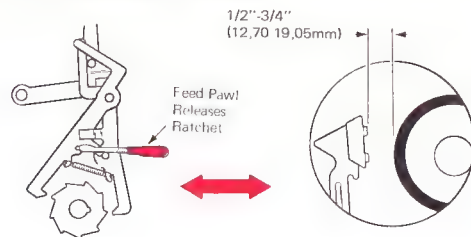
(Level 1 & 2 Only)

190 Cam Release Link (13-004)



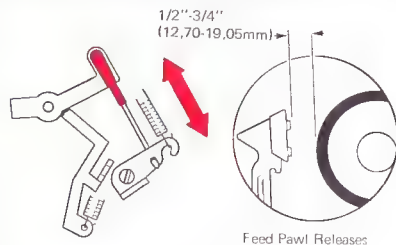
(Level 1 & 2 Only)

191 Feed Pawl Release Link (13-094)



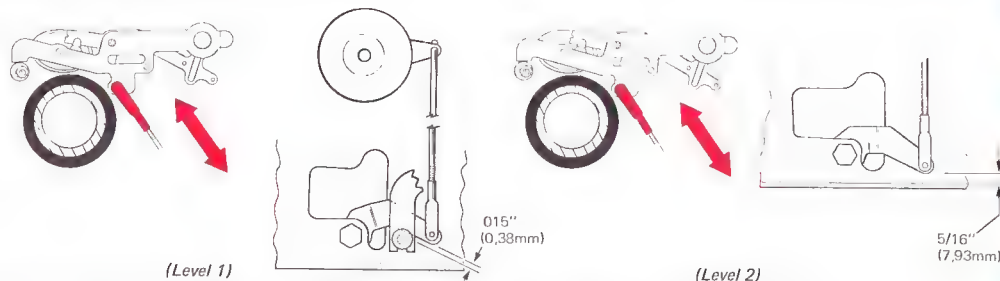
(C & D — Level 3 & 4)

192 Ribbon Feed Bellcrank Link (13-362)



(D1, D4 — Level 5)

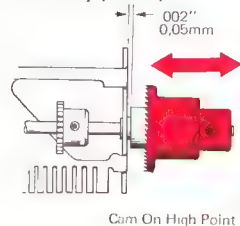
193 Operating Link (13-014)



(Level 1)

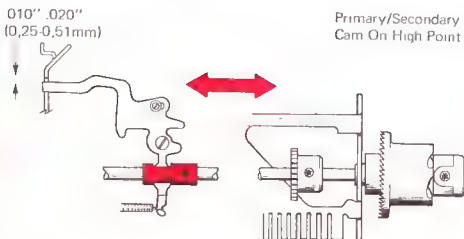
(Level 2)

194 Primary/Secondary Cam Assembly (13-152)



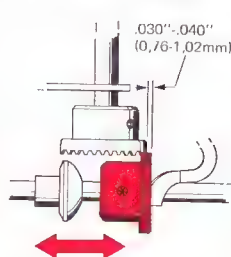
Cam On High Point

195 Drive Shaft Collar (13-023)

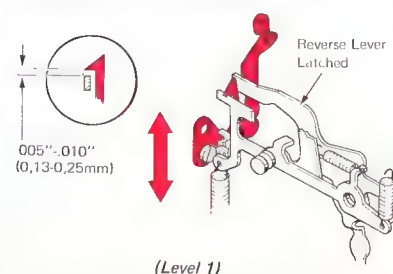


Primary/Secondary
Cam On High Point

196 Drive Gears (13-024)

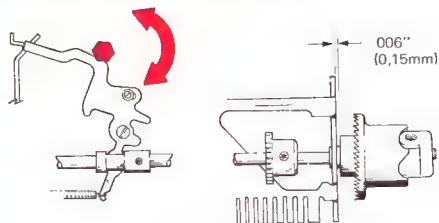


197 Rewind Lever Latch (13-062)



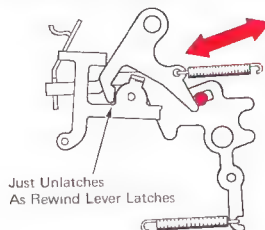
(Level 1)

198 Reverse Lever Eccentric Stop (13-059)



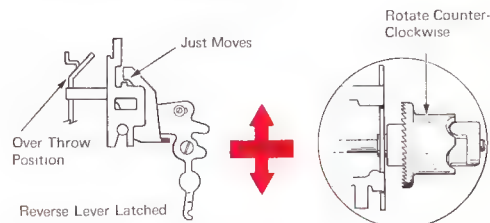
(Level 1)

199 Reverse Lever Stud (13-156)



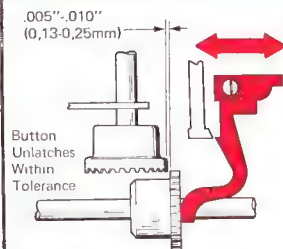
(Level 1)

200 Button Latch Lug (13-057)



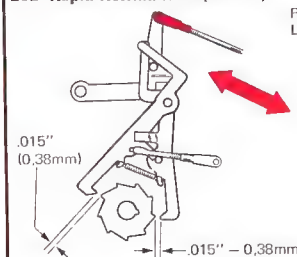
(Level 1)

201 Button Latch (13-207)



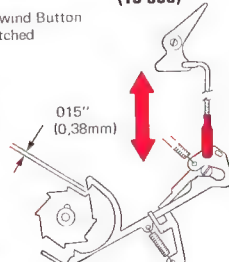
(Level 2 & 3 Only)

202 Rapid Rewind Link (13-600)



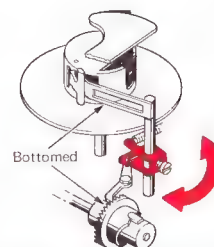
(Level 3 & 4)

(13-630)

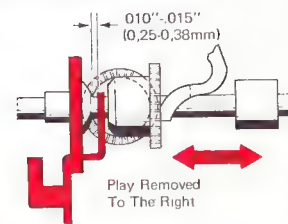


(Left Side View) (Level 5)

203 Right Reversing Cam (13-149)

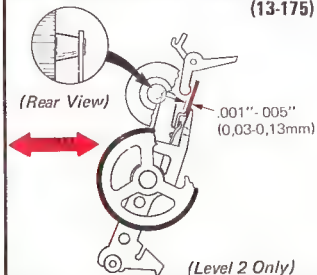


204 Cone Follower (13-175)



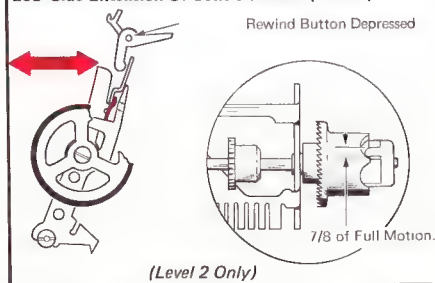
(Level 2 Only)

205 Upper Extension Of Cone Follower (13-175)



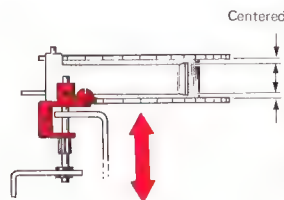
(Level 2 Only)

206 Side Extension Of Cone Follower (13-175)



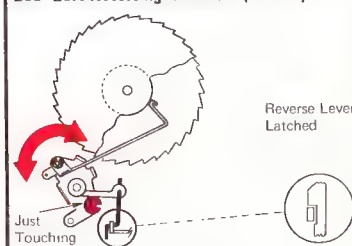
(Level 2 Only)

207 Left Sensing Finger Cam (13-081)



(Level 1 Only)

208 Left Reversing Eccentric (13-082)

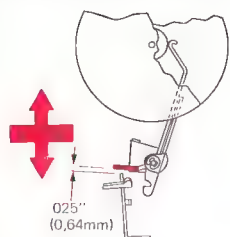


(Level 1)

30- FABRIC RIBBON, DUAL RIBBON

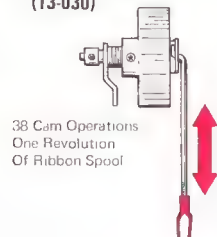
MODEL C1-C4 [13], MODEL D1-D4 [15]

209 Left Sensing Finger (13-203)



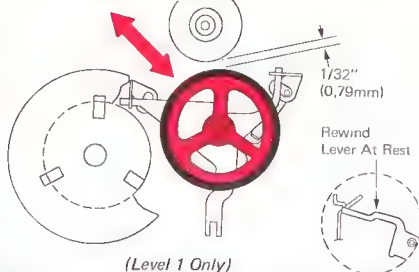
(Levels 2, 3, 4, & 5)

210 Ribbon Feed Link (13-030)



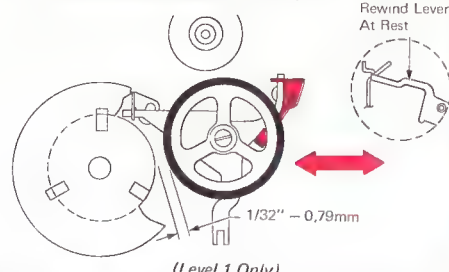
(Level 1 & 2 Only)

211 Transfer Wheel (13-052)



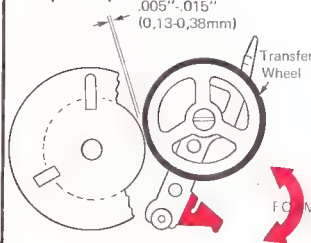
(Level 1 Only)

212 Transfer Wheel Bellcrank (13-045)



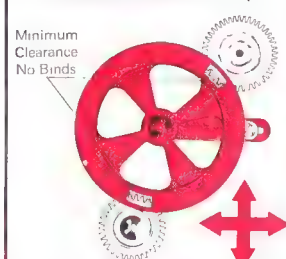
(Level 1 Only)

213 Transfer Wheel Mounting Bracket (13-172)



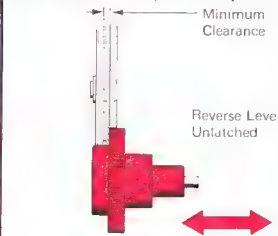
(Level 2 Only)

214 Intermediate Gear (13-573)



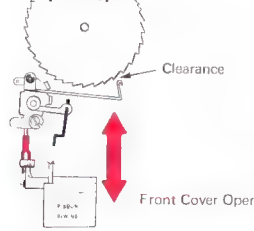
(Levels 4 & 5)

215 Feed Gear (Machines With Intermediate Gear), (Levels 3, 4 & 5)

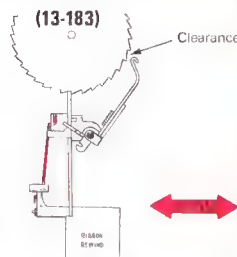


(Levels 3, 4, & 5)

216 Cover Interlock Link (13-073)

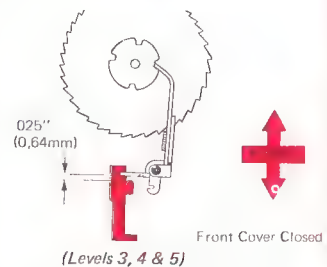


(Level 1)



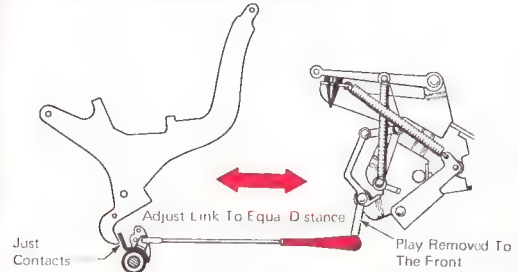
(Level 2)

217 Cover Interlock Lever (13-182)



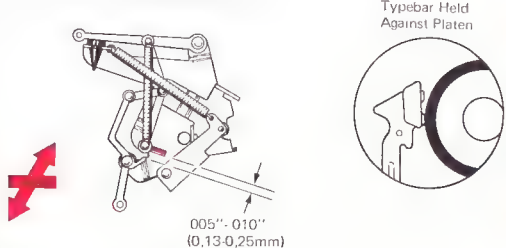
(Levels 3, 4 & 5)

218 Ribbon Lift Operating Link (15-033)



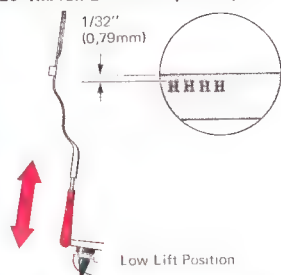
Just Contacts

219 Toggle Plate Stop Lug (15-115)

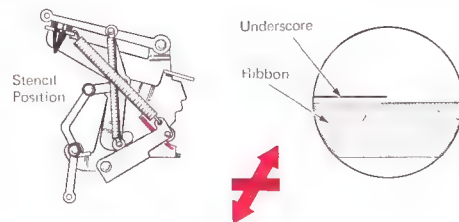


(0.13-0.25mm)

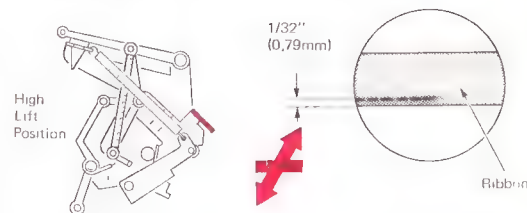
220 Ribbon Lift Guide (15-133)



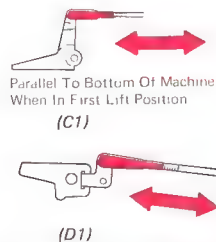
221 Positioning Plate – Lower Lug (15-115)



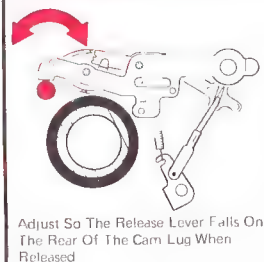
222 Positioning Plate – Upper Lug (15-115)



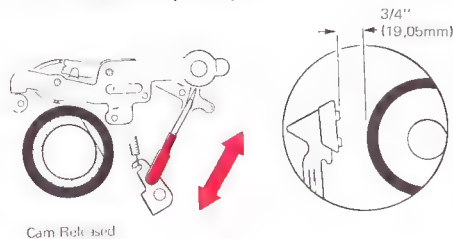
223 Ribbon Position Operating Link (15-033)



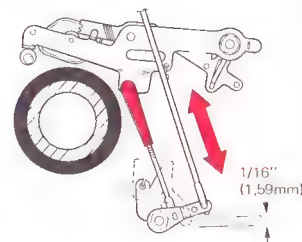
224 Cam Clearance (15-040)



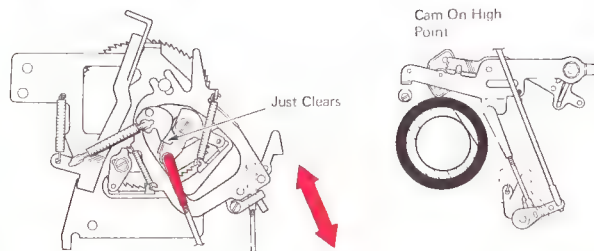
225 Cam Release Link (14-097)



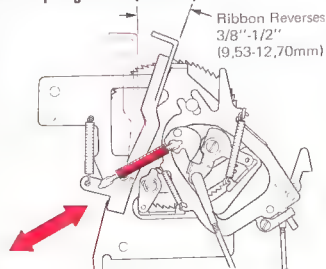
226 Operating Link (14-105)



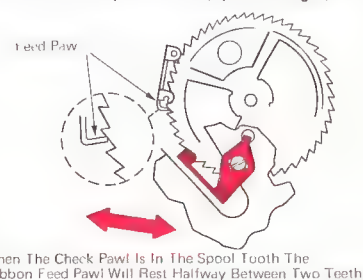
227 Ribbon Feed Link (15-125)



228 Spring Links (15-035)



229 Check Pawl (15-071 Left) (15-128 Right)



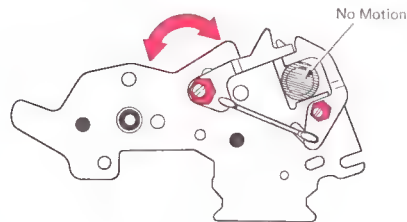
230 Ribbon Spool Retaining Springs (15-079)



231 Platen Latches

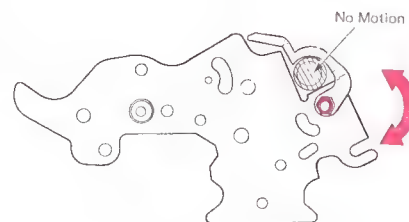
(02-119)

(02-122)



(Level 1)

(02-372)

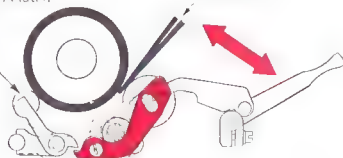


(Level 2)

232 Feed Roll Adjusting Plate (02-163)

Front Feed Roll Will Turn With Platen

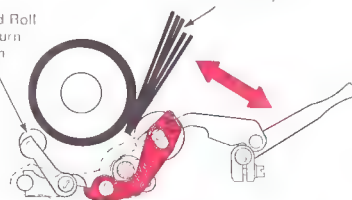
2 Tab Cards
.014" .036mm



(2 Tab Cards Inserted)

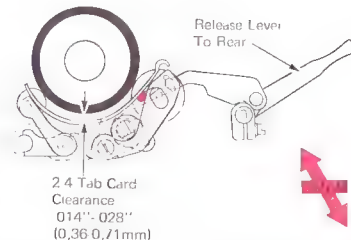
Front Feed Roll Will Not Turn With Platen

5 Tab Cards
.035" - .089mm

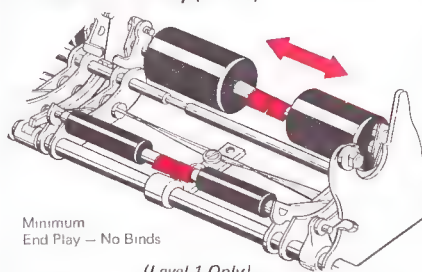


(5 Tab Cards Inserted)

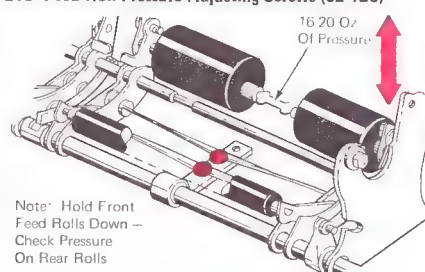
233 Deflector Support Lugs (02-162)



234 Feed Roll End Play (02-173)

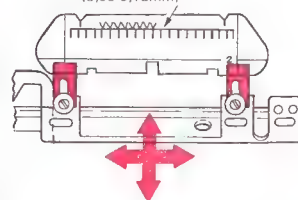


235 Feed Roll Pressure Adjusting Screws (02-126)



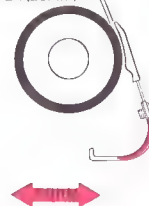
236 Cardholder (02-179)

Parallel To Bottom Of V's
.002"-.005"
(0.05-0.13mm)

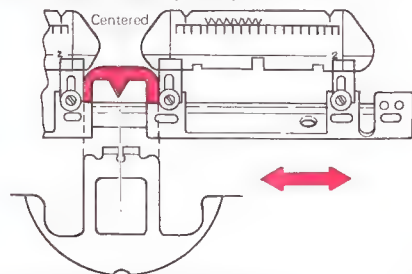


(02-177)

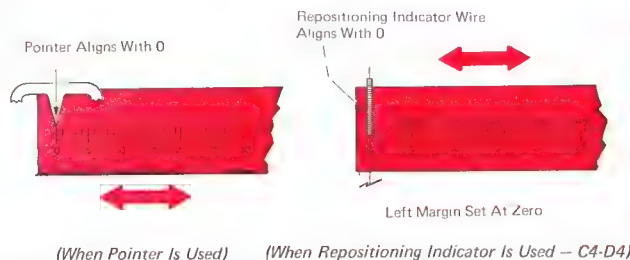
.005" .010"
(0.12 0.25mm)



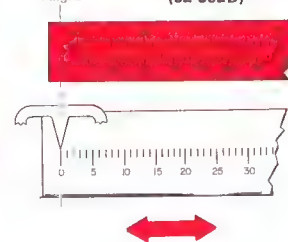
237 Indicator Pointer (02-178)



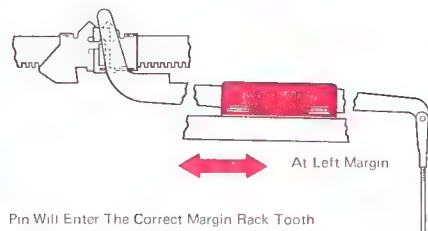
238 Front Paper Scale (02-150)



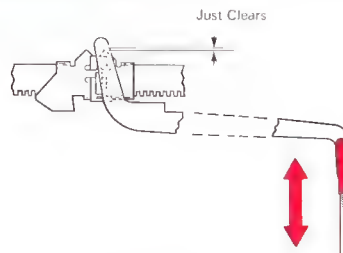
239 Front Paper Table (02-008C) (02-302D)



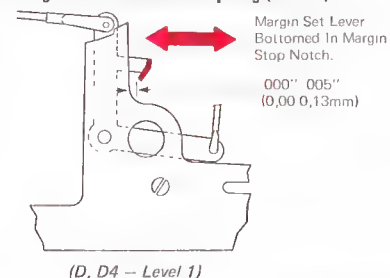
240 Margin Reset Bracket (10-021)



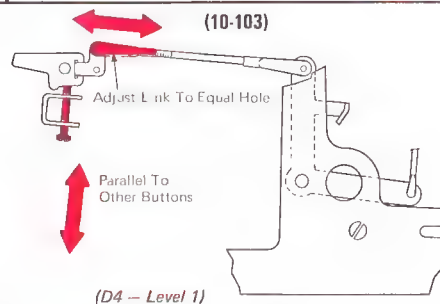
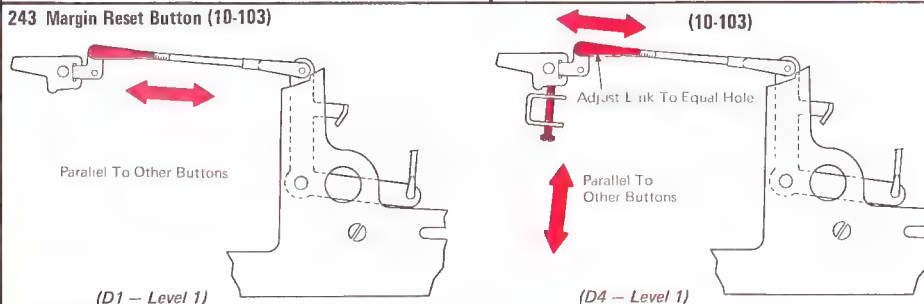
241 Margin Reset Link (02-015)



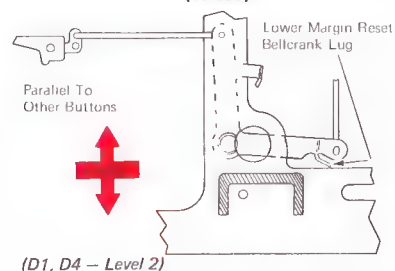
242 Margin Reset Bellcrank Stop Lug (10-105)



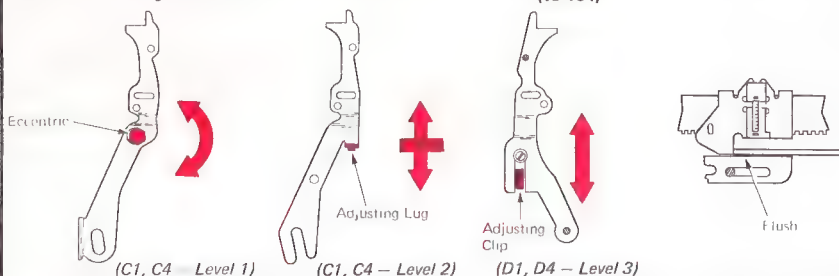
243 Margin Reset Button (10-103)



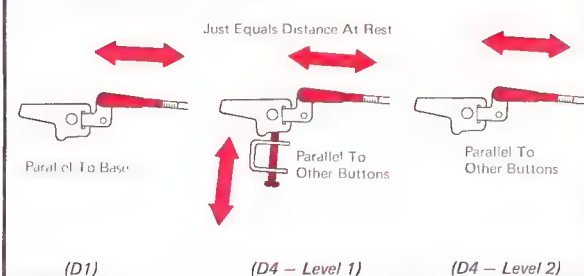
(10-105)



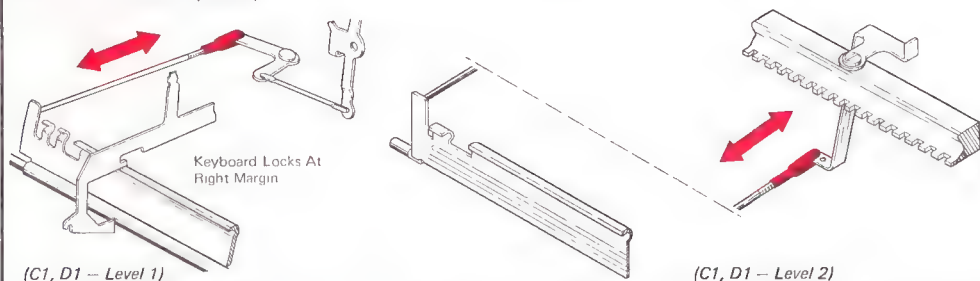
244 Tab Lever Height (18-014)



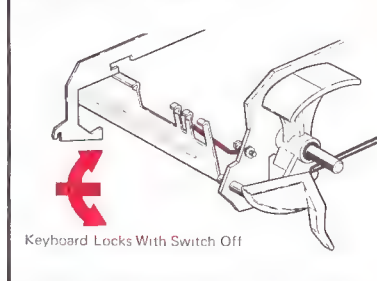
245 Margin Release Link (10-109)



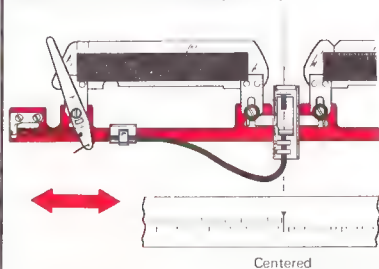
246 Linelock Push Rod (09-003)



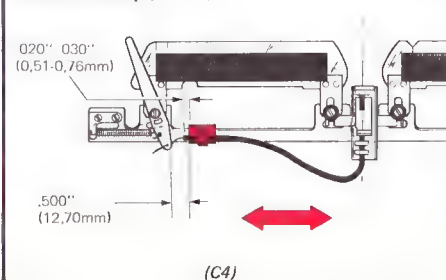
247 Linelock Cam (09-036)



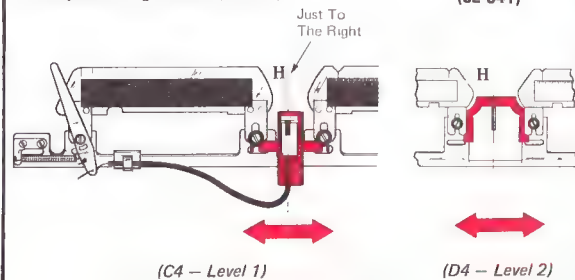
248 Front Rail Dust Cover (02-177)



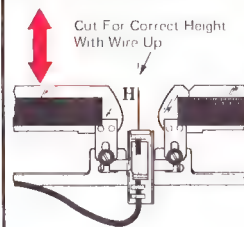
249 Cable Clamp (02-192)



250 Repositioning Bracket (02-189)

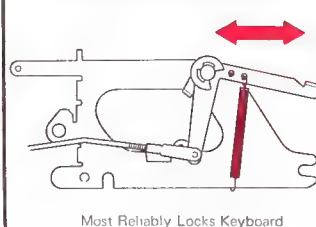


251 Wire Height (02-190)



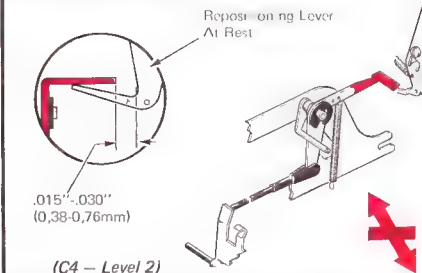
(C4 - Level 1 & 2)

252 Linelock Bellcrank Spring (02-229)



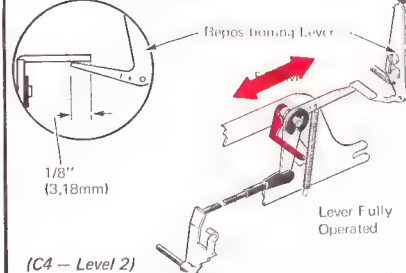
(C4 - Level 2)

253 Linelock Bellcrank (02-231)



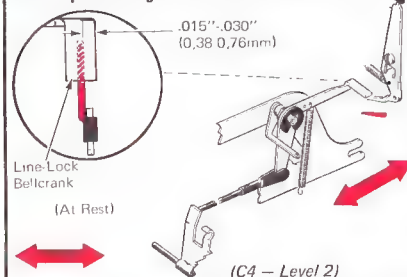
(C4 - Level 2)

254 Bellcrank Step (01-228)



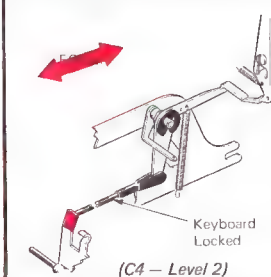
(C4 - Level 2)

255 Repositioning Lever Extension (02-187)



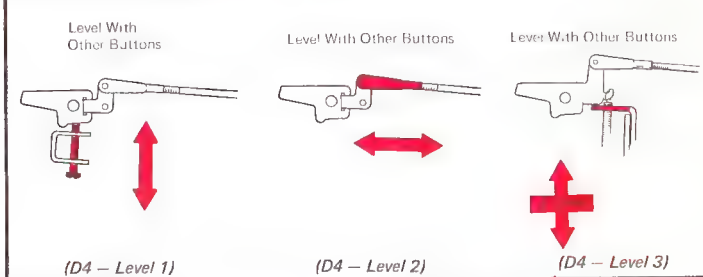
(C4 - Level 2)

256 Linelock Bar (C09-004) (D09-018)



(C4 - Level 2)

257 Flipper Button (02-357)

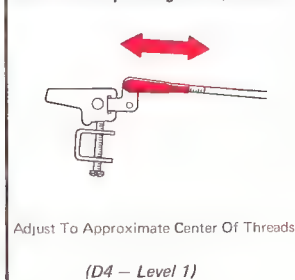


(D4 - Level 1)

(D4 - Level 2)

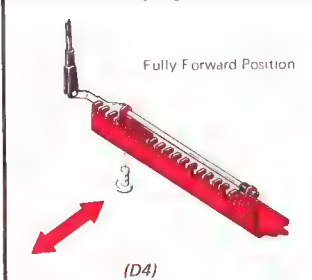
(D4 - Level 3)

258 Front Operating Link (02-358)



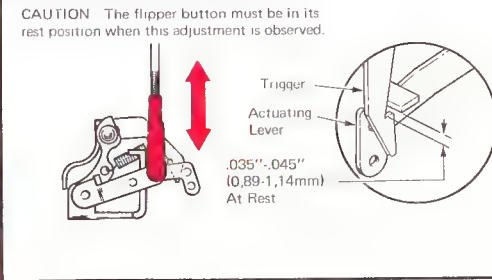
(D4 - Level 1)

259 Cam Lever Spring Bracket (02-355)

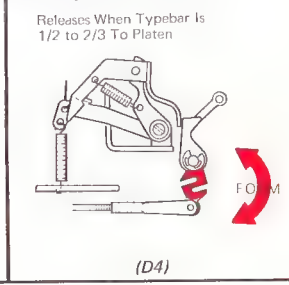


(D4)

260 Rear Operating Link (02-339)



261 Trip Lever (14-375)



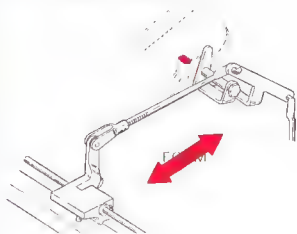
(D4)

-36- REPOSITIONING INDICATOR, NO PRINT, COVERS

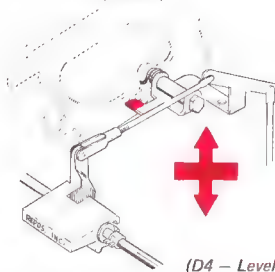
MODEL C1-C4 [13], MODEL D1-D4 [15]

262 Bellcrank Stop (02-337)

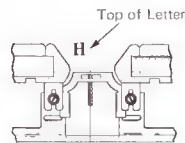
(02-338)



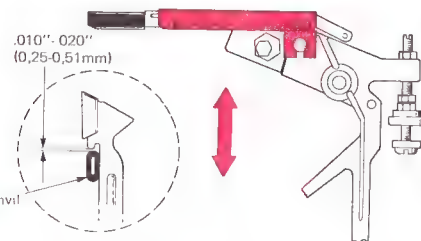
(D4 - Level 1)



(D4 - Level 2)

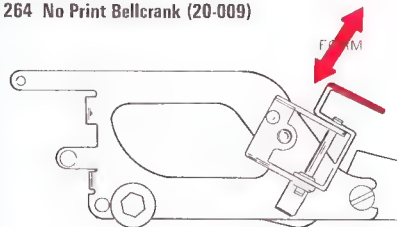


263 Slider Mounting Bracket (20-003)



(D4)

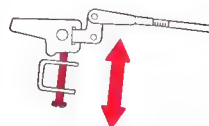
264 No Print Bellcrank (20-009)



(D4)

Form for Positive Operation

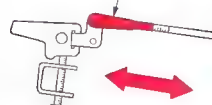
265 No Print Flipper Button (20-019)



Level With Other Buttons

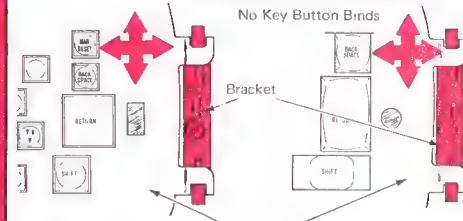
266 Operating Link (20-017)

Equals Hole In Button At Rest



267 Keyplate Brackets C(Right 04-038) (Left 04-057)
D(Right 04-251) (Left 04-057)

No Key Button Binds



(C1, C4)

(D1, D4)

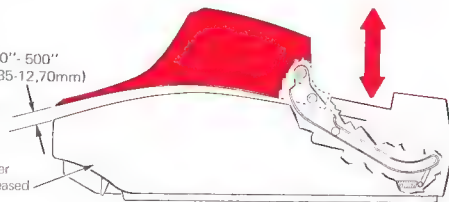
268 Front Cover (04-022)

(04-209)

NOTE: The Level 1 D1, D4 Front Cover Is Adjusted In The Same Way As The C1, C4.

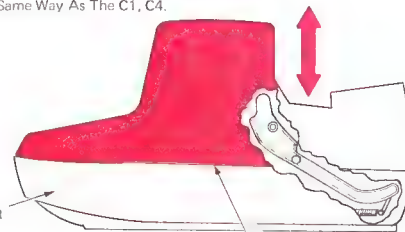
250"-.500"
(6,35-12,70mm)

Bottom Cover
Latches Released



(C1, C4)

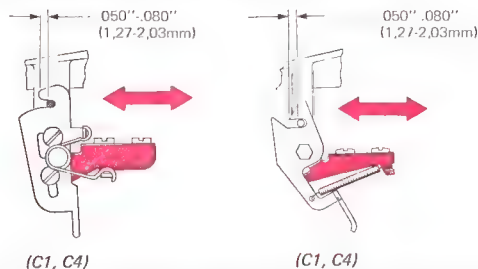
Vinyl Bottom Cover
Prevent Interference Fit



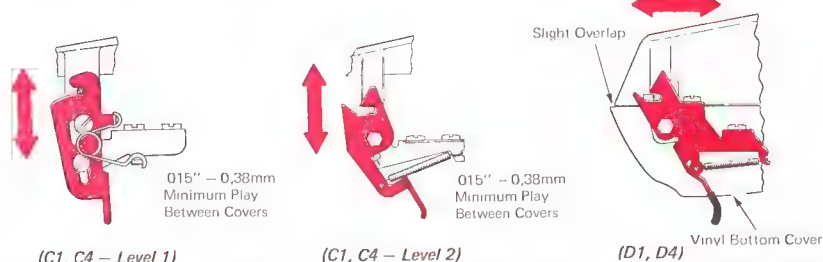
(D1, D4)

Flush

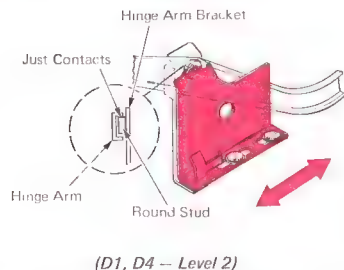
269 Front Cover Latch (Front-To-Rear) (04-060)



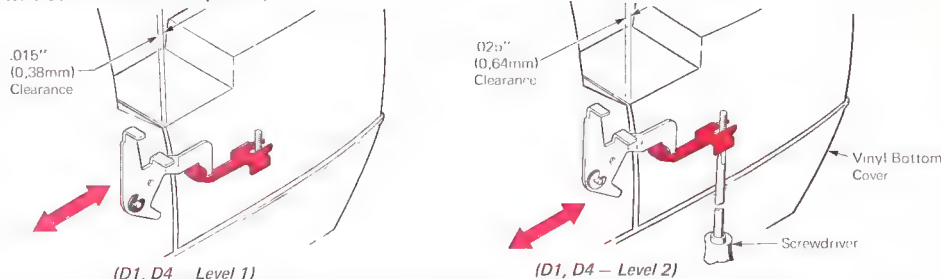
270 Front Cover Latch (04-032)



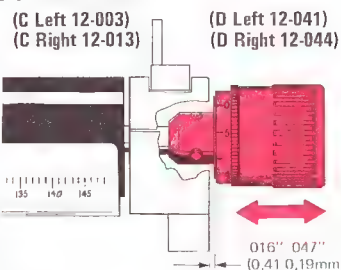
271 Hinge Arm Bracket (Right 04-256) (Left 04-224)



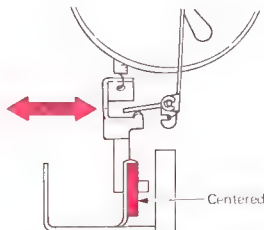
272 Rear Cover Latch Bracket (04-212)



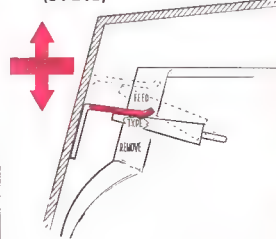
273 Platen Knobs



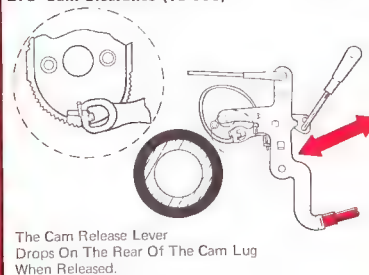
274 Cover Interlock, Fabric Ribbon (04-218)



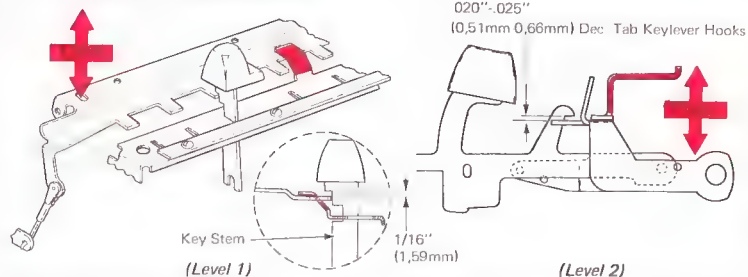
275 Cover Interlock, Carbon Ribbon (04-218)



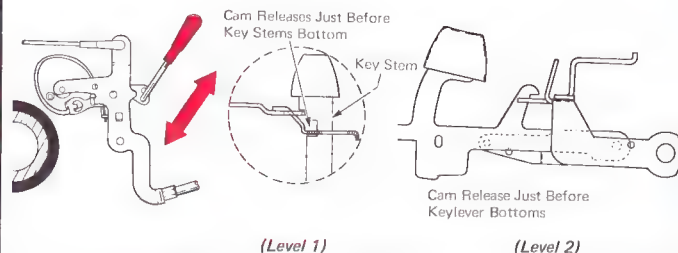
276 Cam Clearance (18-006)



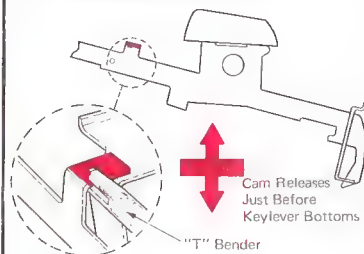
277 Cam Trip Bail Rest Position (30-227)



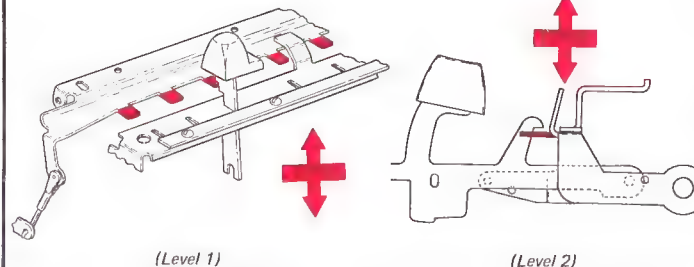
278 Cam Release Link (18-102)



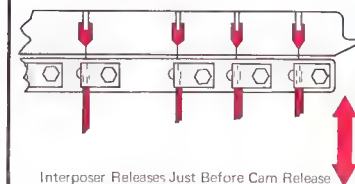
279 Tab Keylever Lug (30-207)



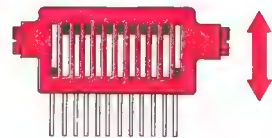
280 Individual Cam Release (30-225)



281 Interposer Cable Assemblies (30-237)

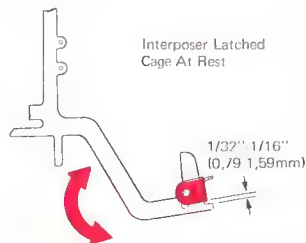


282 Interposer Release Lever Guide (30-106)

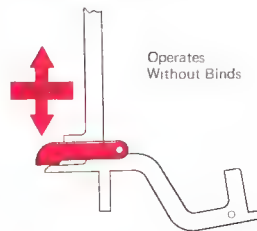


Release Lever Bottoms As Interposers Are Released

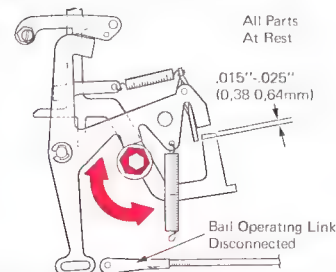
283 Interposer Link Keeper (30-159)



284 Interposer Interlock Bail (30-171)

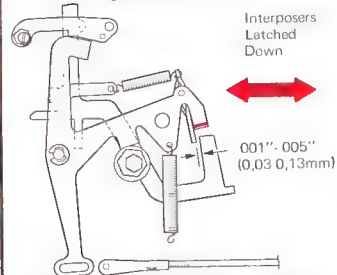


285 Bail Assembly Eccentric Stop (30-110)

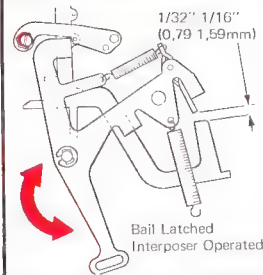


Model C1-C4 [13], Model D1-D4 [15]

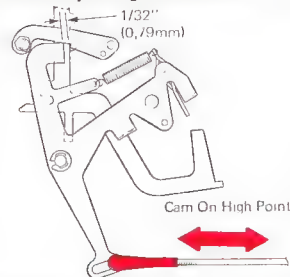
286 Restoring Bail Lug (30-112)



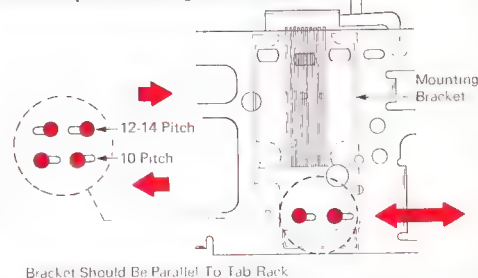
287 Bail Latch (30-115)



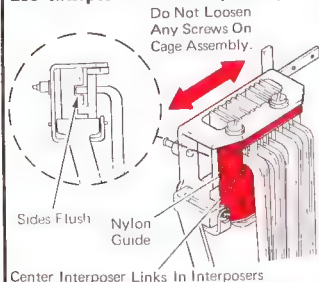
288 Bail Operating Link (18-012)



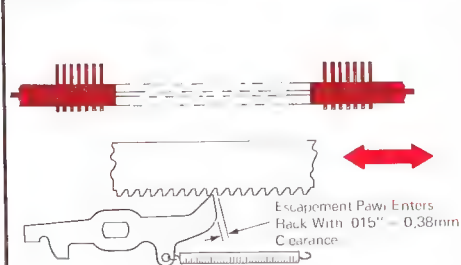
289 Interposer Mounting Bracket (30-165)



290 Interposer Link Guide (30-134)



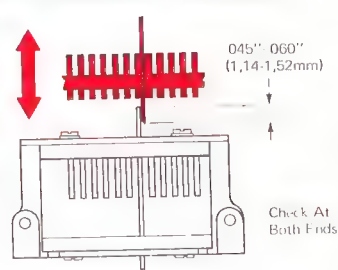
291 Tab Rack (30-095)



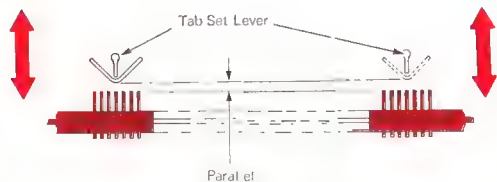
292 Tab Rack (Radially) (30-095)



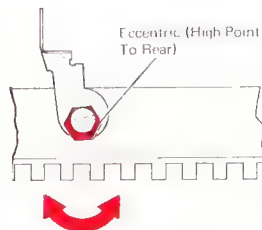
293 Tab Rack (Up & Down) (30-095)



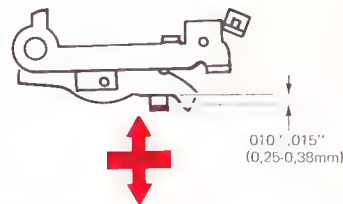
294 Tab Rack (Front-To-Rear) (30-095)



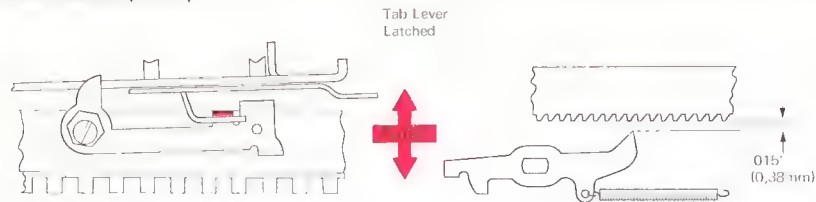
295 Tab Latch Eccentric (18-022)



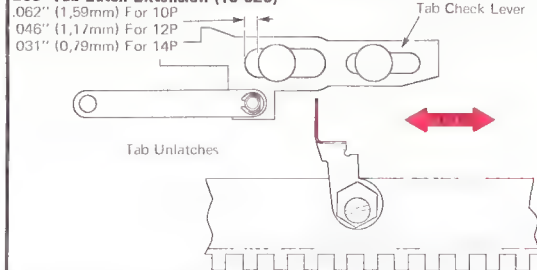
296 Pawl Release Lever (02-087)



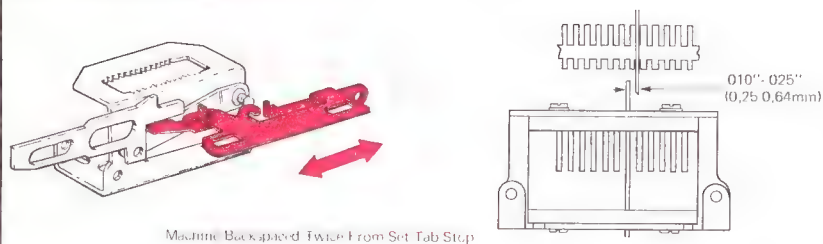
297 Pawl Clearance (02-087)



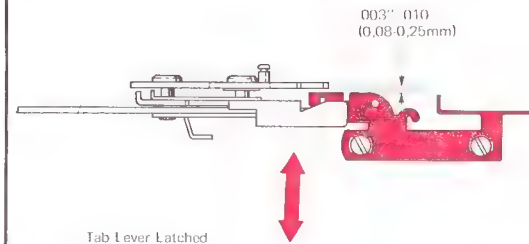
298 Tab Latch Extension (18-020)



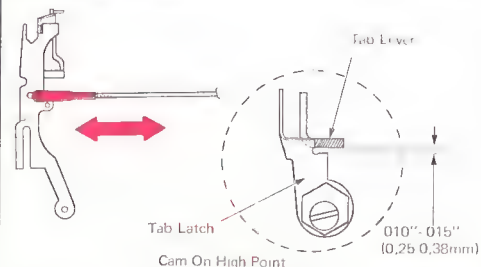
299 Tab Check Lever Keeper (30-067)



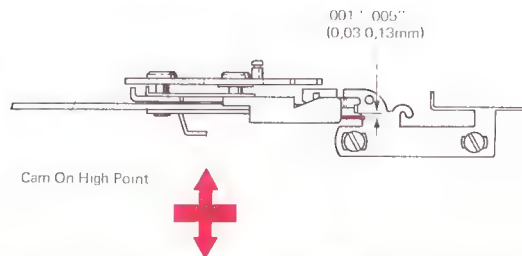
300 Tab Check Lever Keeper Clearance (30-067)



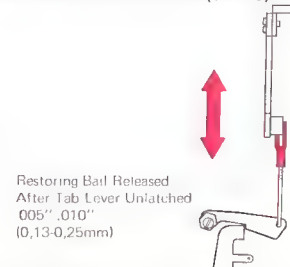
301 Tab Lever Extension (18-012)



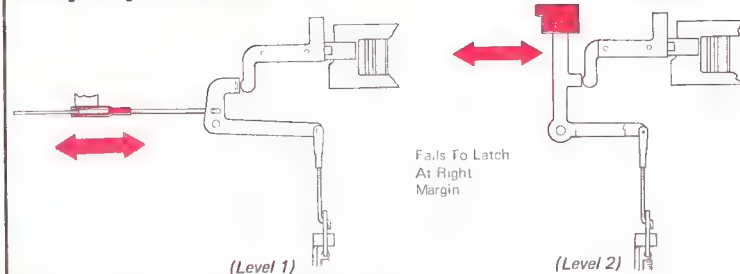
302 Tab Lever Extension (30-066)



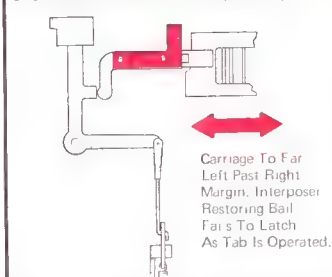
303 Latch Release Link Clevis (30-079)



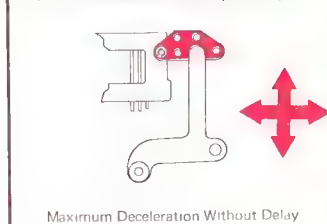
304 Right Margin Latch (30-100)



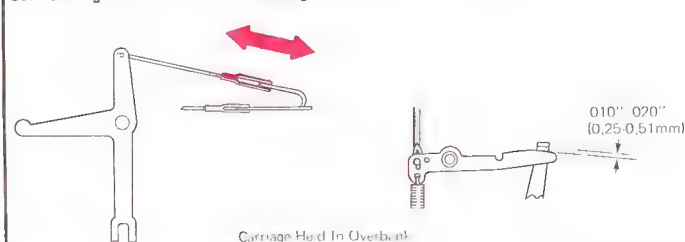
305 Final Knockout Lever (30-131)



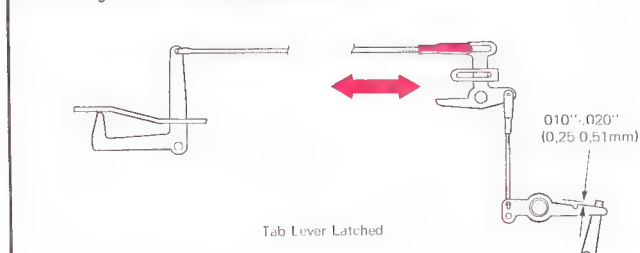
306 Tab Decelerator Link (30-144)



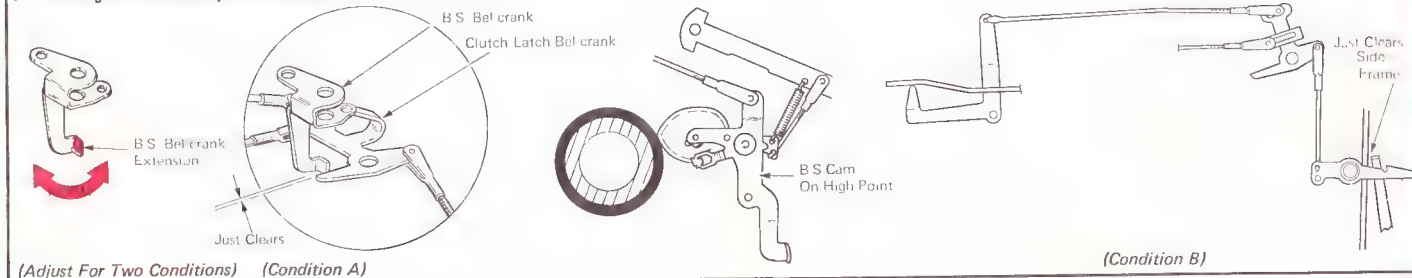
307 Carriage Return Clutch Unlatching (30-085)



308 Carriage Return Tab Interlock (30-056)



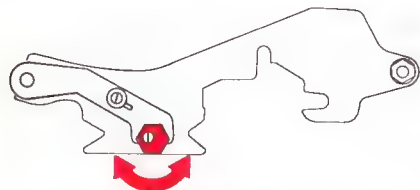
309 Carriage Return Backspace Interlock (20-038)



-42- OPEN END CARRIAGE

MODEL C1-C4 [13], MODEL D1-D4 [15]

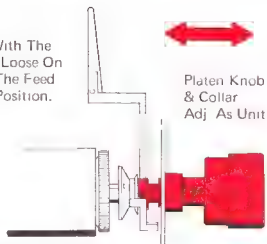
310 Ring And Cylinder (54-121)



Loosen Rear Most Screw & Locknut On Carriage End Plates & Feed Roll Center Supports. Then Adjust As In Carriage & Rollers Section

311 Platen Variable Release Lever (54-067)

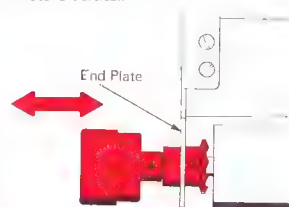
NOTE This Should Be Done With The Left Knob & Sprocket Loose On The Platen Shaft And The Feed Rolls In The Released Position.



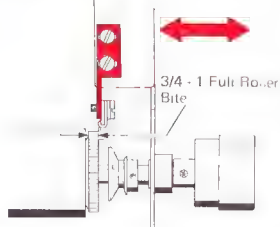
Adjust For A Positive Platen Variable Operation

312 Left Platen Knob & Sprocket (54-030)

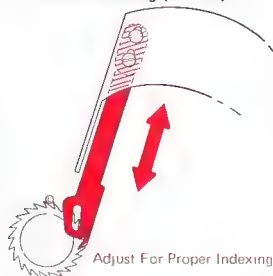
Adjust So The Carriage End Plate Is Vertical.



313 Detent Arm Mounting Bracket (54-077)

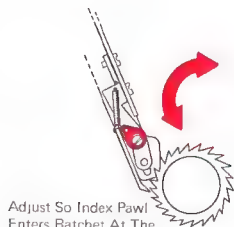


314 Platen Indexing (54-089)



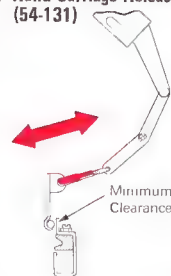
Adjust For Proper Indexing

315 Eccentric Plate (54-057)



Adjust So Index Pawl Enters Ratchet At The Top Of A Tooth

316 Hand Carriage Release (54-131)



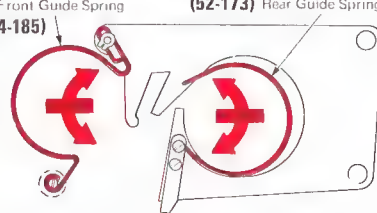
Minimum Clearance

317 Chain Tightener (54-021)

To Prevent Chain From Missing Teeth



318 Front And Rear Guides, Tensioners & Springs (54-185) (52-173)

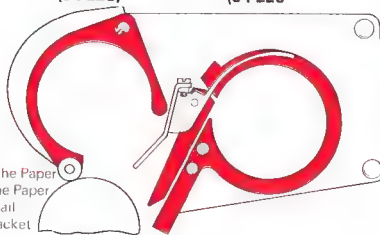


Form To A low Extension & Restoration Without Bands

(Level 1)

(54-226)

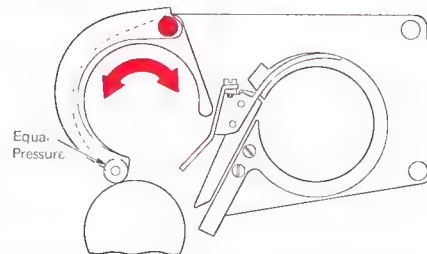
(54-228)



Adjust To Prevent The Paper From Contacting The Paper Guide Assemblies, Bail Arm Assemblies, Bracket And Guide

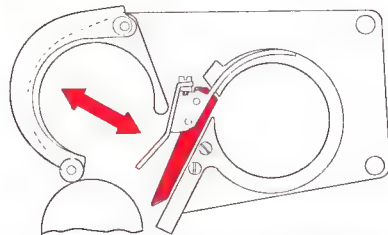
(Level 2)

319 Paper Bail Eccentric (54-151)



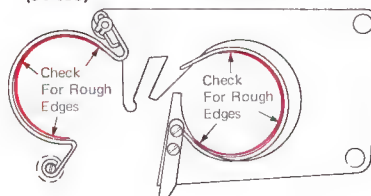
Equal Pressure

320 Rear Paper Guides (Level 1 54-171) (Level 2 54-227)



Adjust To Take Thickness Of The Paper Without Binds

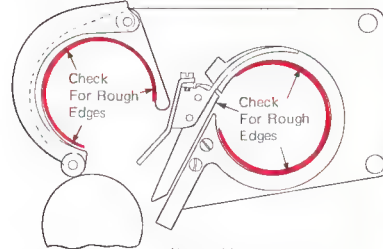
321 Edges Of Paper Guides (54-185) (54-173)



(Level 1)

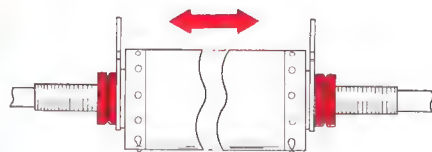
(54-226)

(54-228)



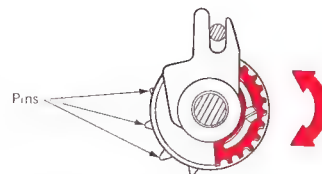
(Level 2)

322 Platen Core Lateral Position (49-026)



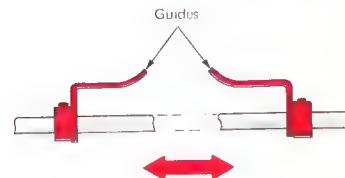
Platen Core Centered

323 Pinwheel Assembly (49-016)



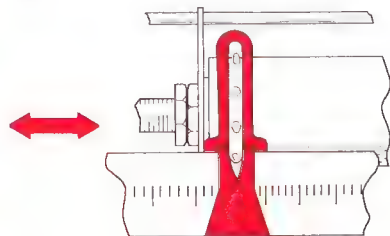
Adjust So The Lower Pin Begins To Leave Its Hole Just Above The Front Scale.

324 Form Guides (49-010)

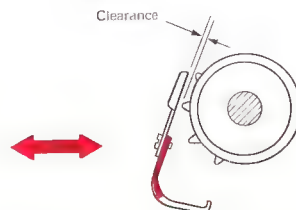


Adjust The Guides To Align The Form With The Platen Pins

325 Feed Finger (49-030)



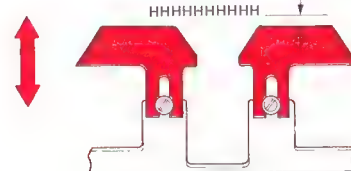
326 Cardholders (02-177)



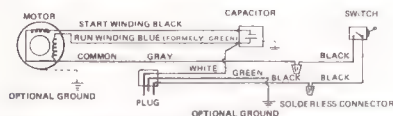
(49-033)

(49-032)

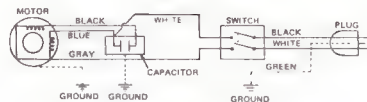
0.01" - 0.05"
(0.03 - 0.13mm)



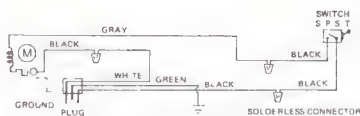
327 Motor Circuits (US)



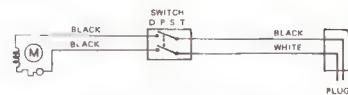
Non Double Insulated, Capacitor (S.P.S.T. Switch)



Non Double Insulated, Capacitor Start (D.P.S.T. Switch)



Non Double Insulated, Shaded Pole

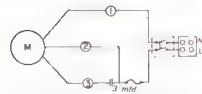


Double Insulated, Shaded Pole

328 Motor Circuits (WT)



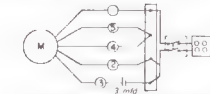
ONE-VOLTAGE MOTOR



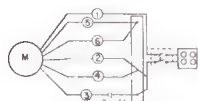
ONE-VOLTAGE MOTOR
with FUSE (UK)



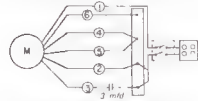
BI-VOLTAGE MOTOR 5 WIRES
connected for 110, 115 or 120 V



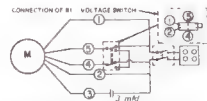
BI-VOLTAGE MOTOR 5 WIRES
connected for 220, 230 or 240 V



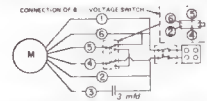
BI-VOLTAGE MOTOR 6 WIRES
connected for 110, 115 or 120 V



BI-VOLTAGE MOTOR 6 WIRES
connected for 220, 230 or 240 V



BI-VOLTAGE MOTOR 5 WIRES
connected with BI-VOLTAGE SWITCH

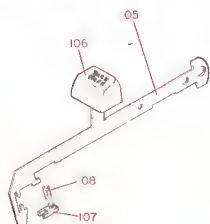
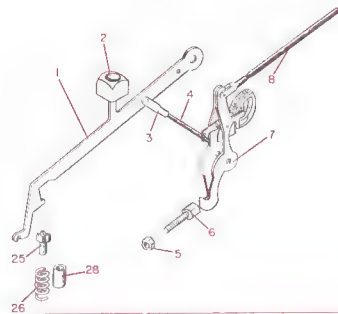
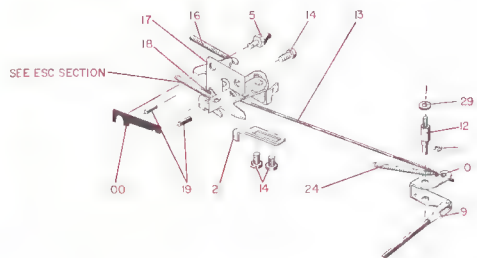


BI-VOLTAGE MOTOR 6 WIRES
connected with BI-VOLTAGE SWITCH

BACKSPACE MODEL C1 & D1

MECH. CODE

01



SEE TYPEBAR OPERATING FOR CAM FULCRUM WIRE
SEE FRAMES FOR CAM STOP BRACKET

CONVERT HOLE TYPE CLEVIS TO
PIN TYPE



35 B/M TO REPLACE B.S
BELL CRANK STUD

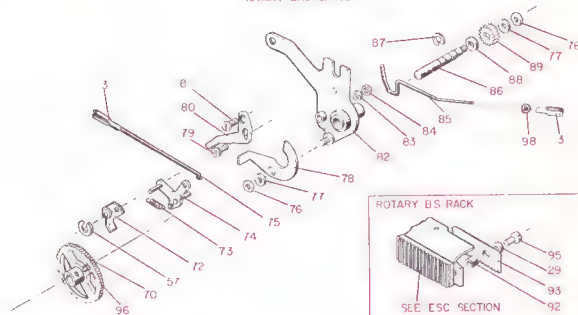


BACKSPACE MODEL C4 & D4

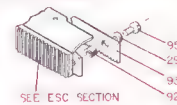
MECH. CODE

01

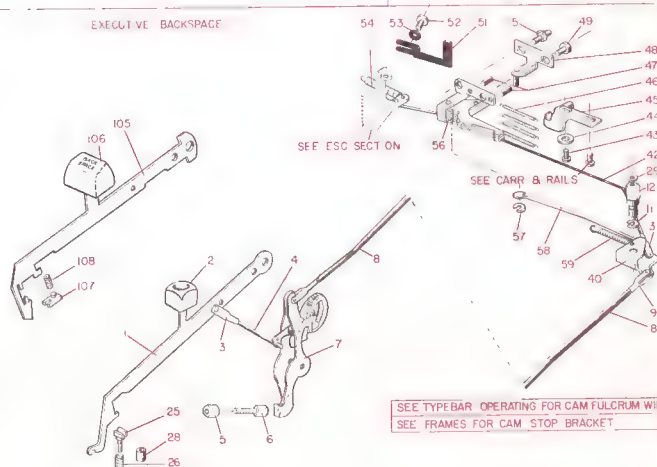
ROTARY BACKSPACE



ROTARY B.S. RACK



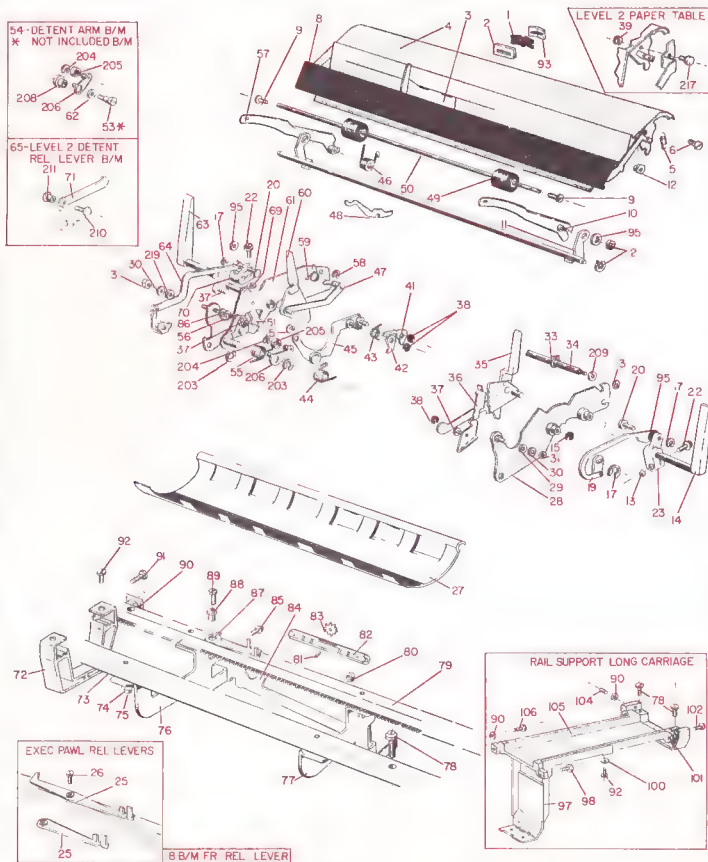
EXECUTIVE BACKSPACE



SEE TYPEBAR OPERATING FOR CAM FULCRUM WIRE
SEE FRAMES FOR CAM STOP BRACKET

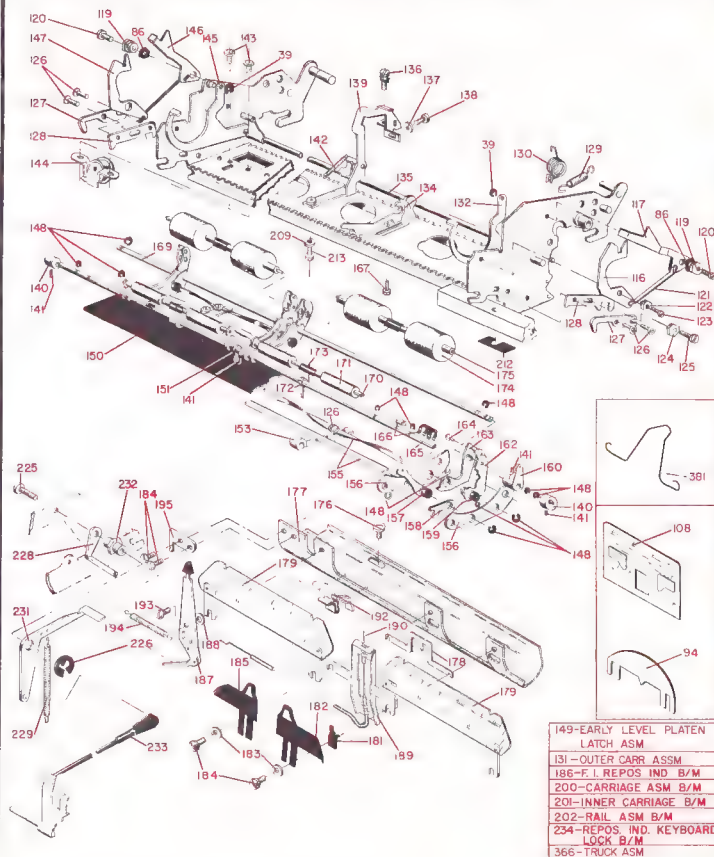
MECH. CODE

02

CARRIAGE & RAILS
MODEL C1 & C454-DETENT ARM B/M
* NOT INCLUDED B/M65-LEVEL 2 DETENT
REL. LEVER B/M

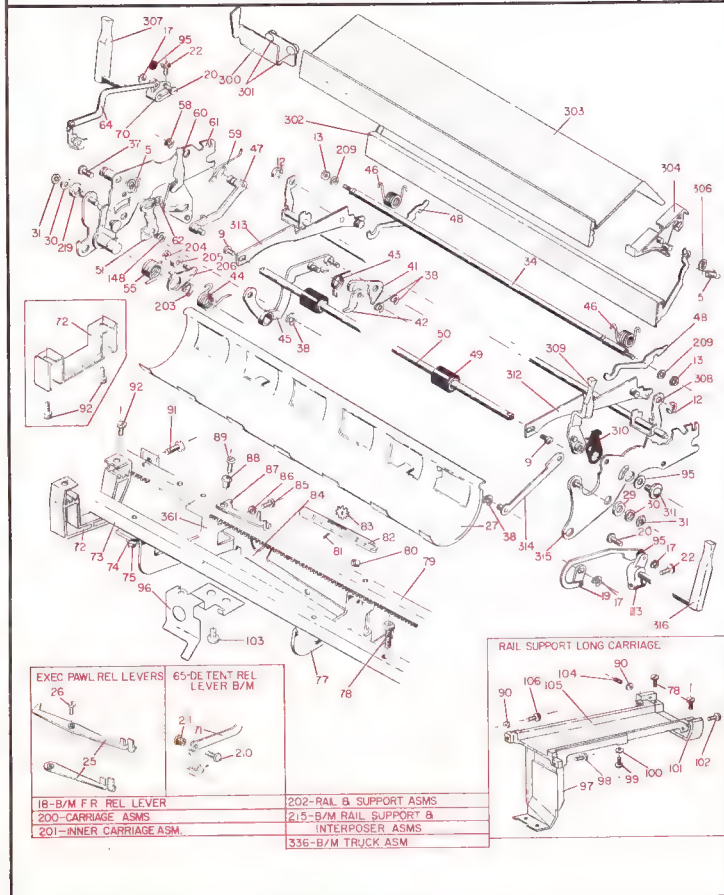
MECH. CODE

02

CARRIAGE & RAILS
MODEL C1 & C4

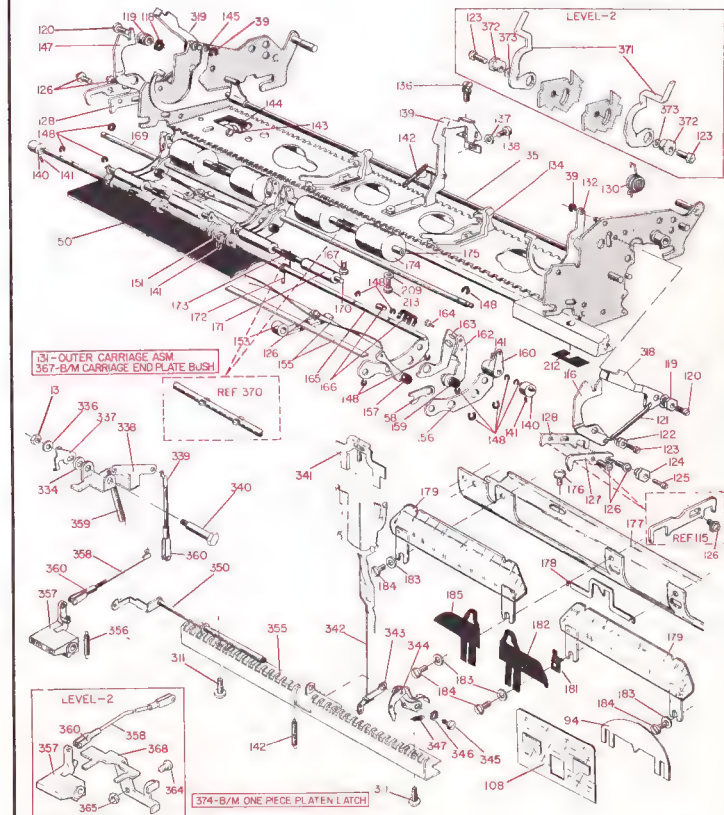
CARRIAGE & RAILS

MODEL D1 & D4

MECH. CODE
02

CARRIAGE & RAILS

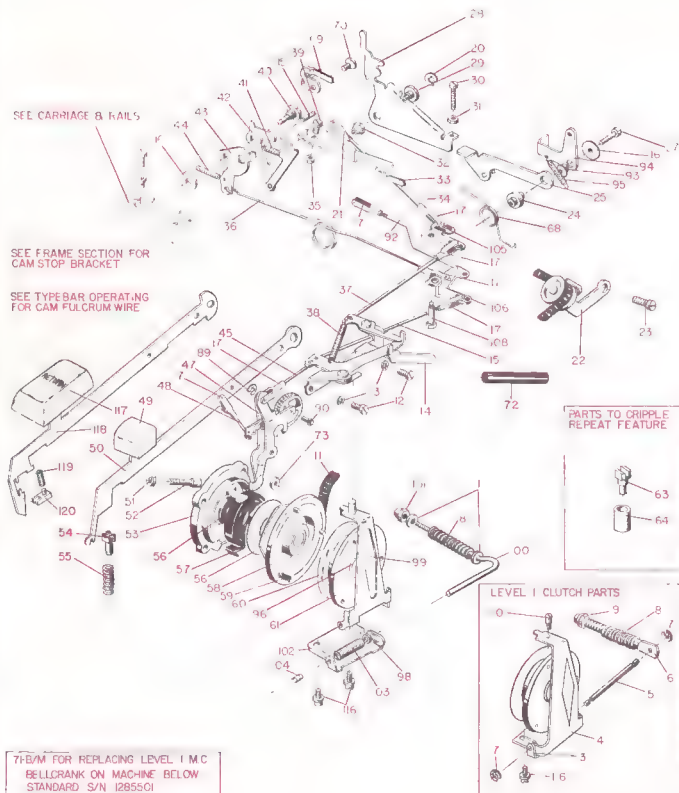
MODEL D1 & D4

MECH. CODE
02

MECH. CODE

03

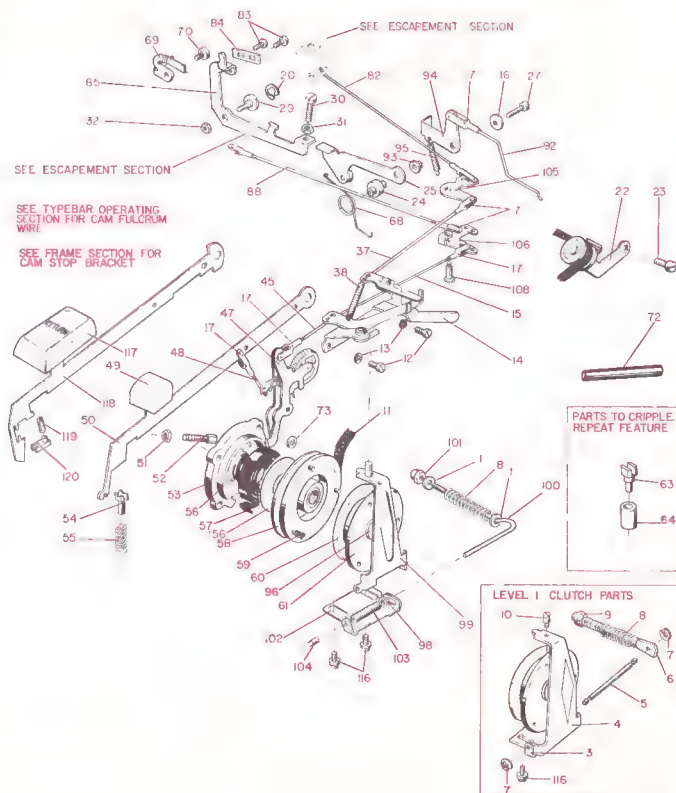
CARRIAGE RETURN MODEL C1 & D1



MECH. CODE

03

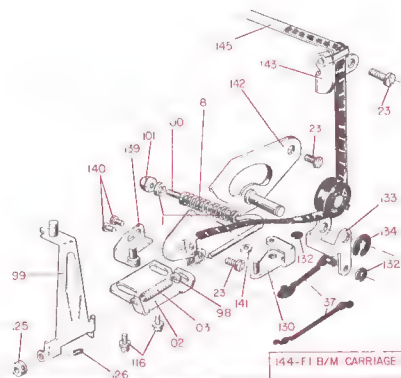
CARRIAGE RETURN MODEL C4 & D4



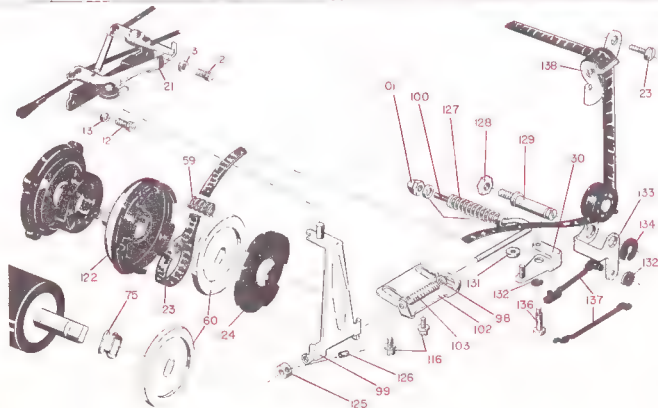
CARRIAGE RETURN TORQUE LIMITER

MECH. CODE

03

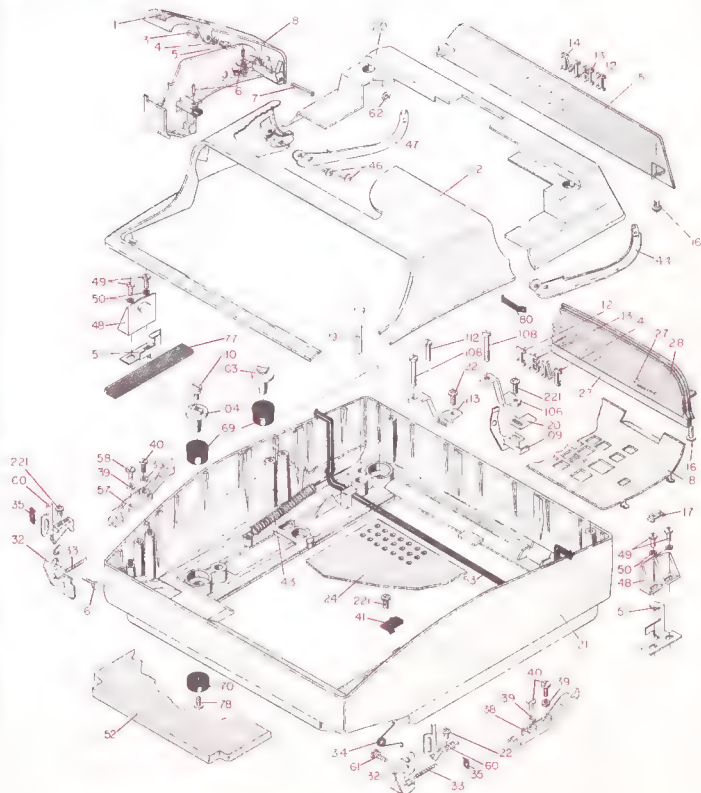


144-F1 B/M CARRIAGE RETURN TORQUE LIMITER

COVERS
MODEL C1 & C4

MECH. CODE

04



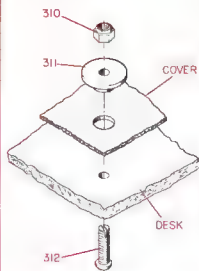
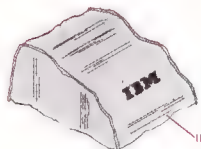
REF 264-PATENT LABEL

MECH. CODE

04

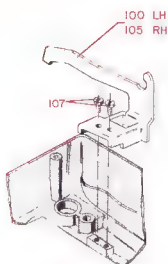
COVERS
MODEL C1 & C4

DUST COVER

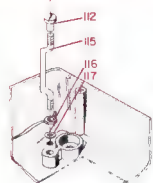


THEFT DETERENT BOLT DOWN

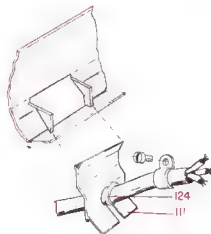
MODEL C TILT-UP



COVER CONVERSION PARTS FOR SHADED POLE MOTOR



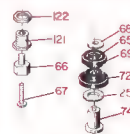
CORD ADAPTER



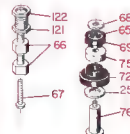
BOLT DOWN & ELEVATION HARDWARE



NORMAL



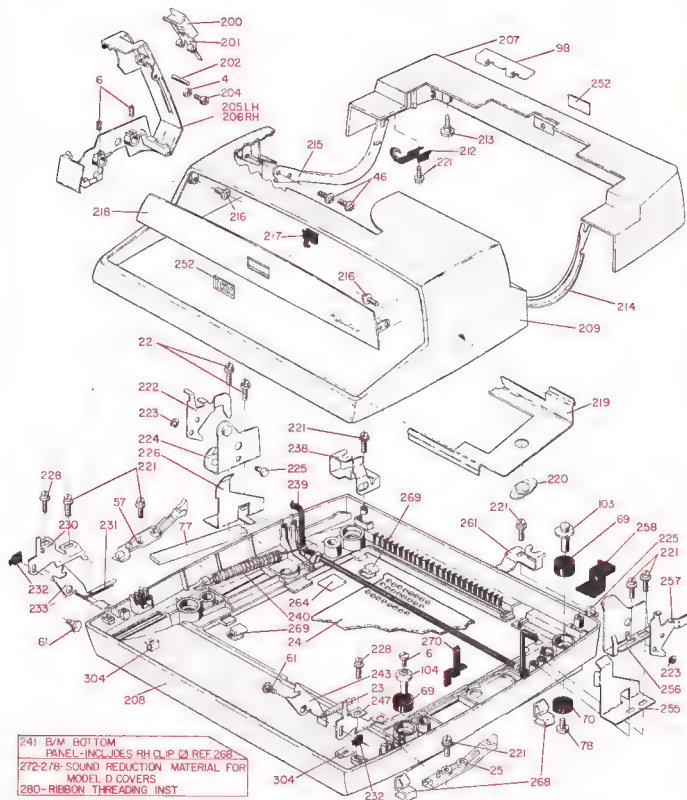
83 B/M TO ELEV APPROX 3/8" 84 B/M TO ELEV 3/4" OR 1"



- 85-SNAP OUT KEYPLATE
- 86-SNAP IN/OUT TOP COVER
- 87-COVER CONVERSION B/M
- 88, 89, 91-PAINT PRIMERS & PARTS
- 97-ROUND SHIF STOP GROMMET
- 123-PLUG FASTENER B/M

MECH. CODE

04

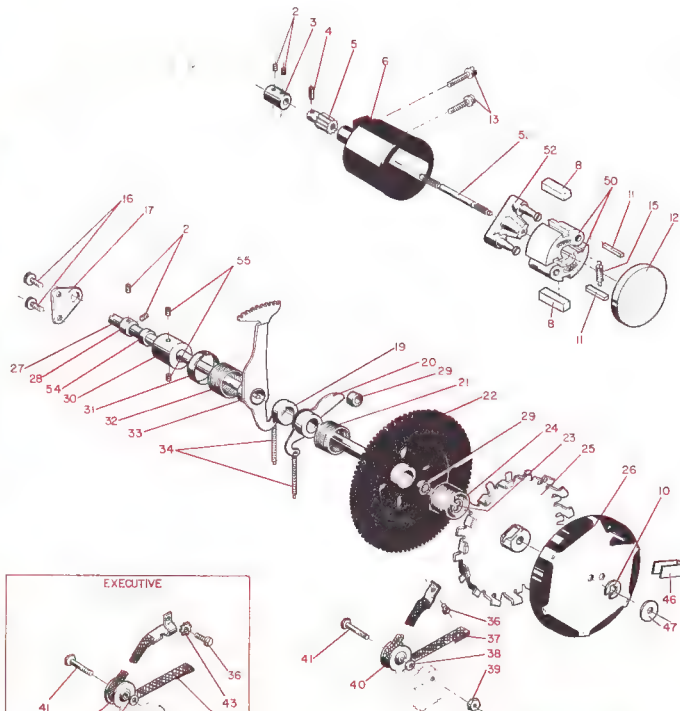
COVERS
MODEL D1 & D4

241-B/M BOTTOM
 PANEL-INCLUDES RH QLP Q2 REF 268
 272-278-SOUND REDUCTION MATERIAL FOR
 MODEL D COVERS
 280-RIBBON THREADING INST

GOVERNOR & DECELERATOR

MECH. CODE

05

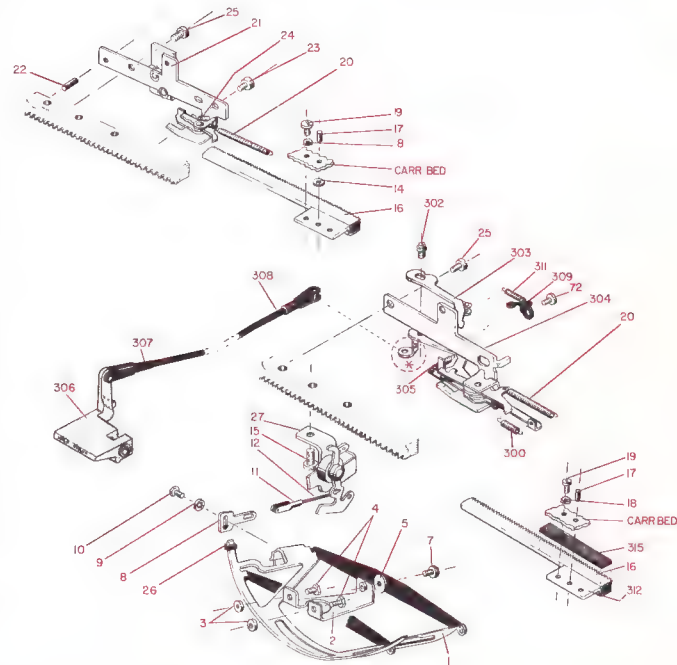


1 COMPLETE GOV. ASM.
45 COMPLETE DECELERATOR
ASM.

ESCAPEMENT
MODEL C1 & D1

MECH. CODE

06



27-ESC. TRIP LEVER ASM

*
NOTCH
INDICATES
PITCH

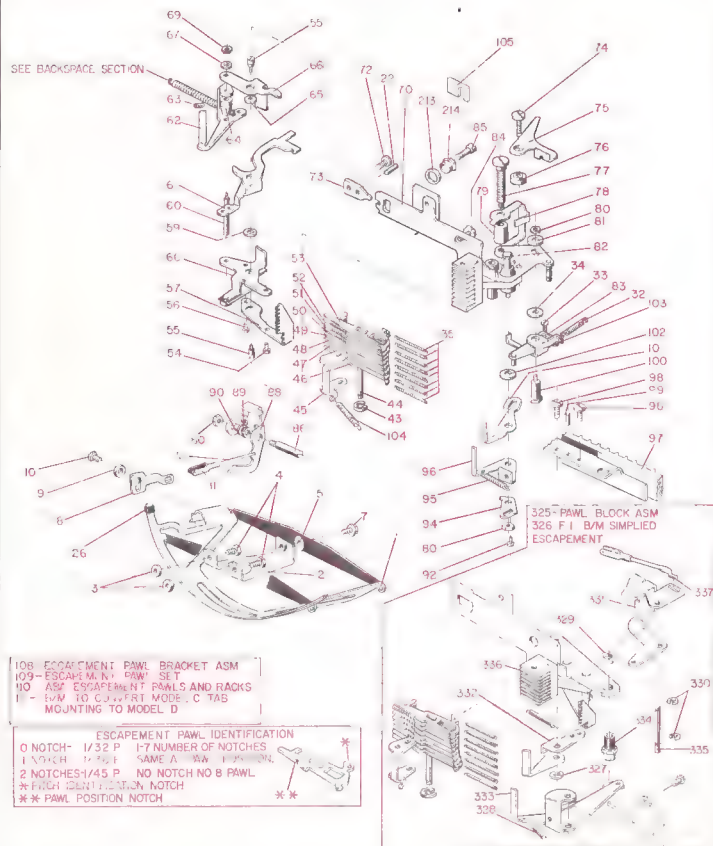


NOTCH IDENTIFICATION
0 = 10 PITCH 4 = 11 PITCH
1 = 8 PITCH 5 = 14 PITCH
2 = 9 PITCH 6 = 6 2/5 PITCH
3 = 12 PITCH

MECH. CODE

06

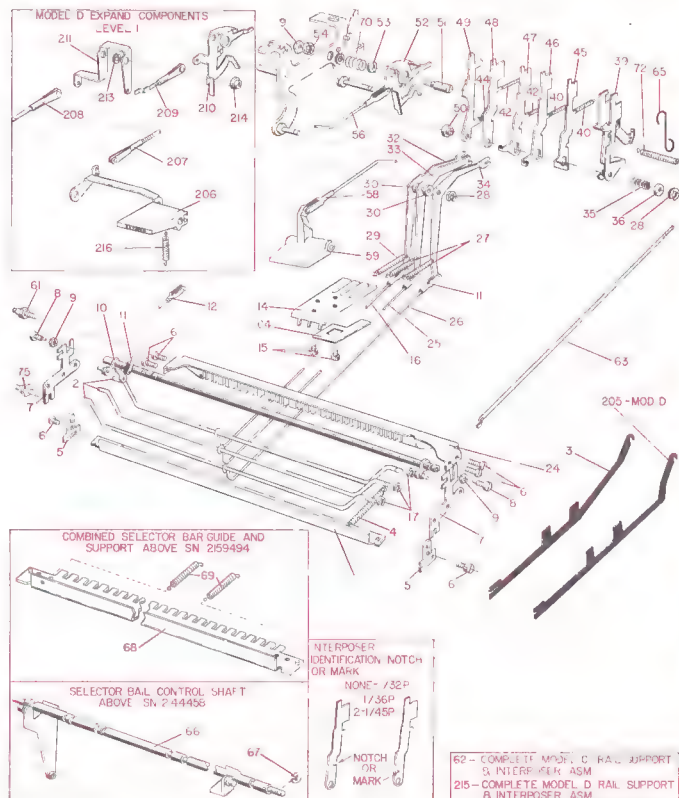
ESCAPEMENT MODEL C4 & D4



MECH. CODE

07

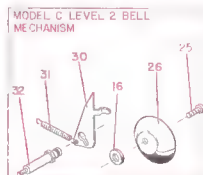
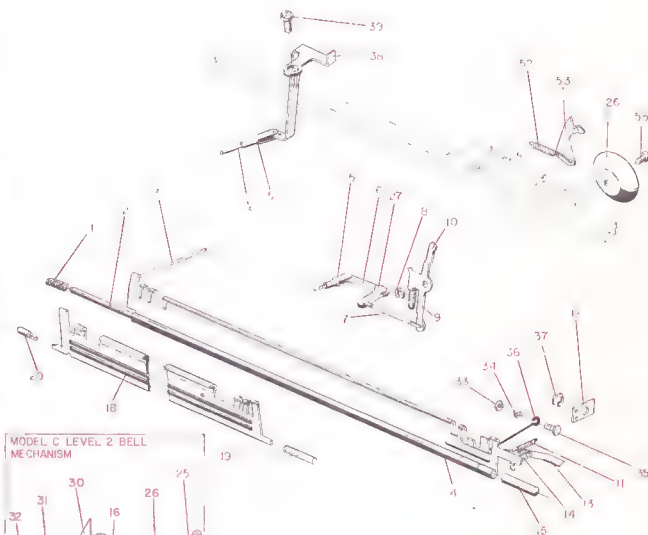
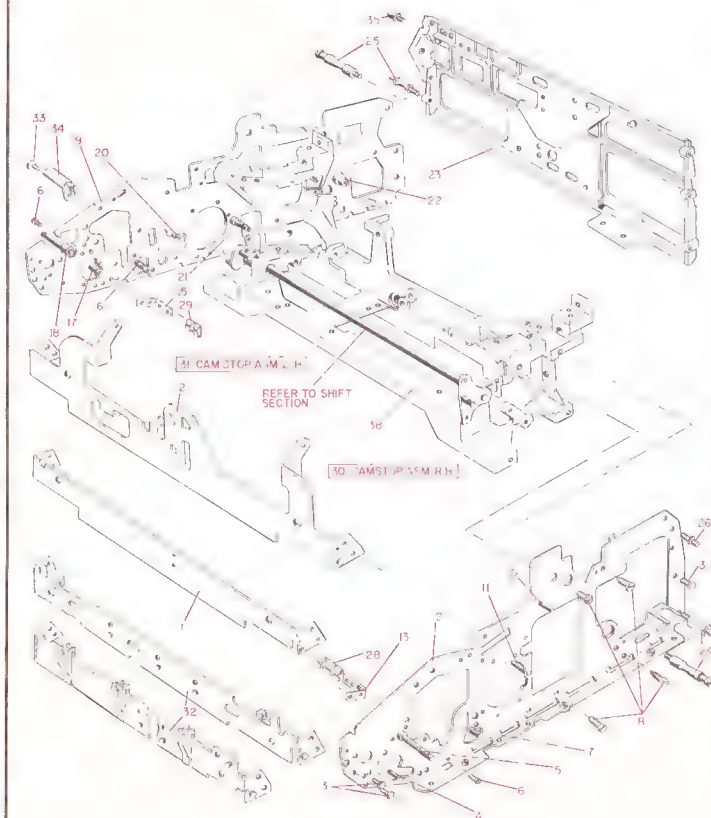
ESCAPEMENT CONTROL MODEL C4 & D4



FRAMES

MECH. CODE
08

KEYBOARD LOCK & BELL

MECH. CODE
09

MECH. CODE

10

MARGINS

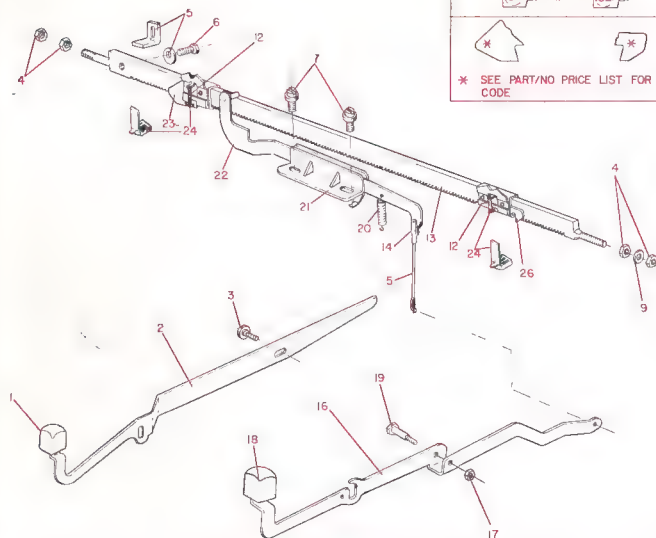
MARGIN STOP IDENTIFICATION

[OR] 24 [OL]

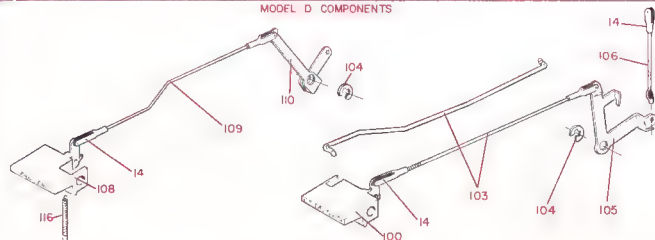
X

X

* SEE PART/NO PRICE LIST FOR CODE



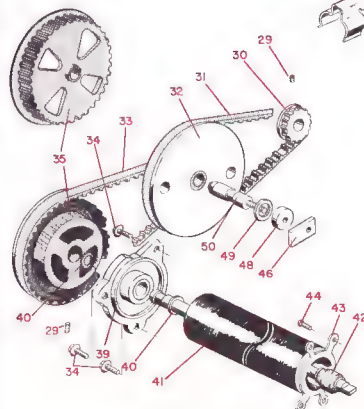
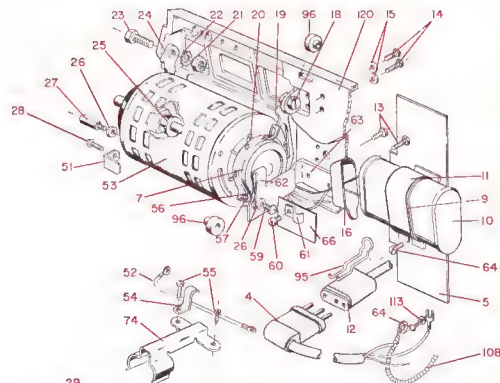
MODEL D COMPONENTS



MECH. CODE

11

MOTOR & DRIVE, OLD STYLE & SPECIAL VOLTAGE



SHAFT MOUNTED PARTS

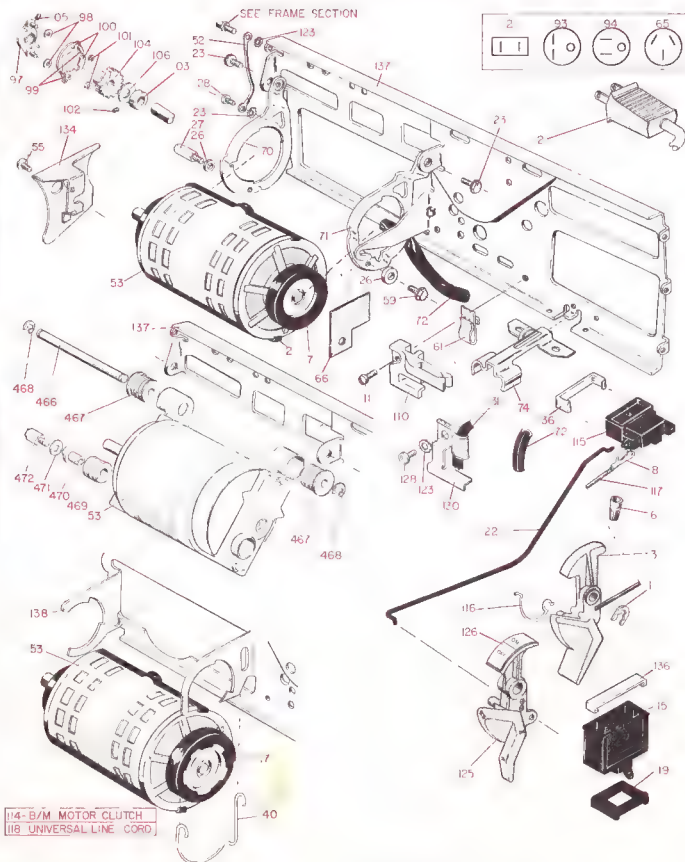


92-MOTOR CONVERSION B/M

MOTOR & DRIVE, CURRENT LEVEL

MECH. CODE

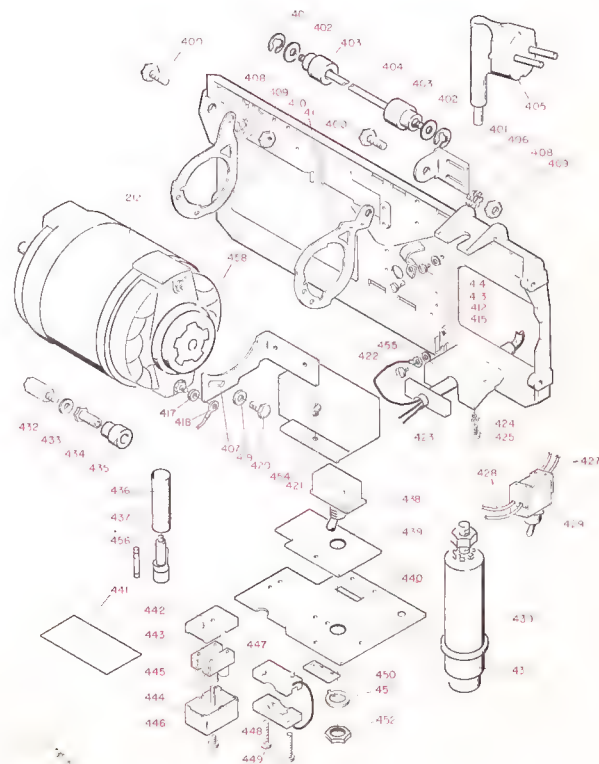
11



MOTOR, GERMAN PRODUCTION INTERMEDIATE LEVEL

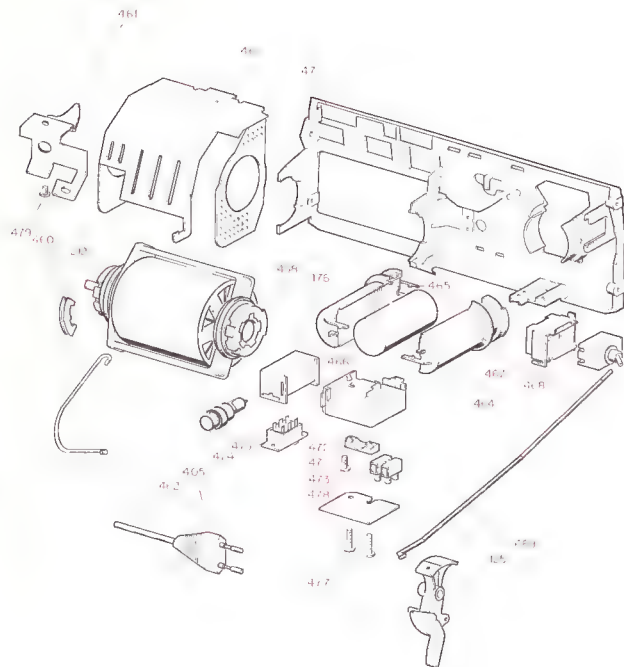
MECH. CODE

11



11

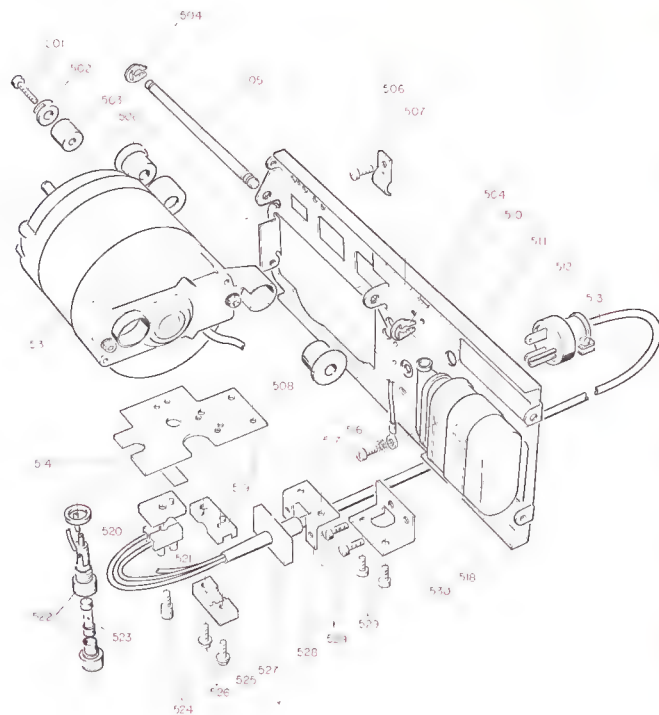
MOTOR, GERMAN PRODUCTION
SOLID MOUNT DOUBLE INSULATION



MECH. CODE

11

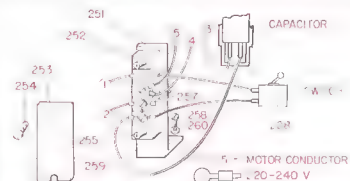
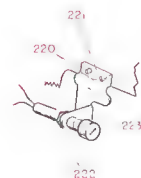
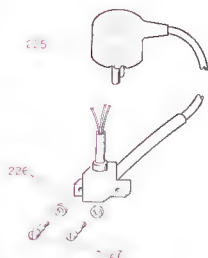
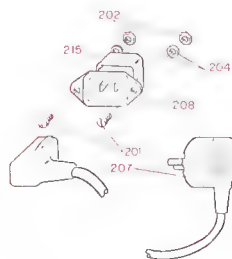
MOTOR CANADIAN PRODUCTION
MODEL D1 & D4



LINECORDS & SPECIAL COMPONENTS MODEL C1 & C4

MECH. CODE

11

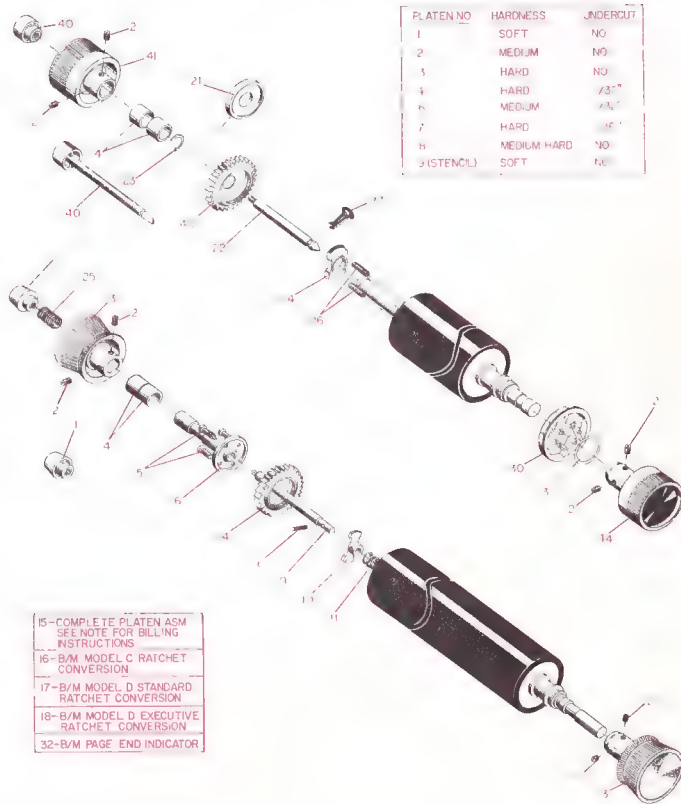


FOR 110-220 V CONDUCTORS 4 & 5 HAVE TO BE CONNECTED AS SHOWN BY DASHED TERMINALS

PLATEN

MECH. CODE

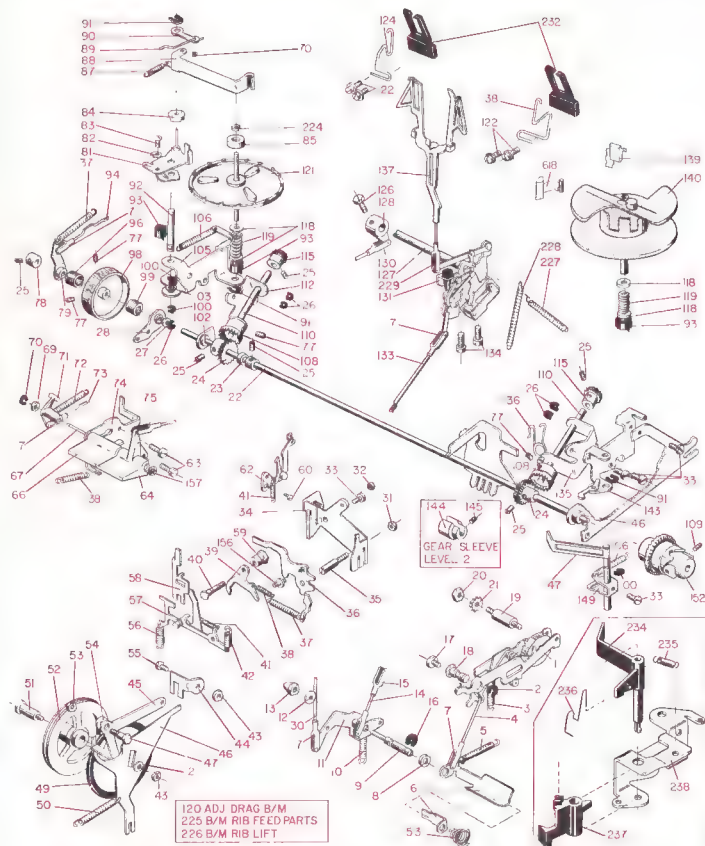
12



MECH. CODE

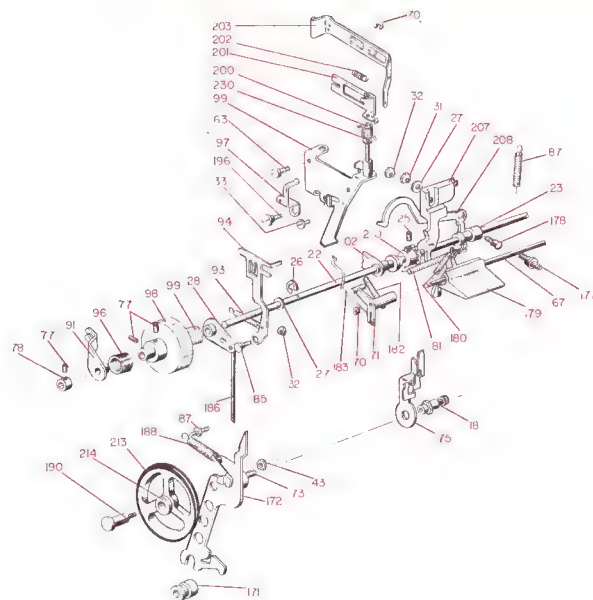
13

FABRIC RIBBON



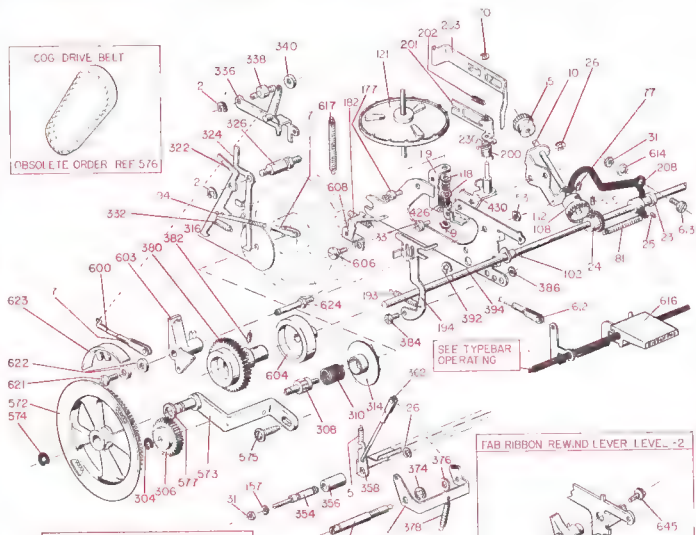
MECH. CODE

13

MODIFIED RIBBON
MODEL C1 & C4

POSITIVE DRIVE FABRIC RIBBON

MECH. CODE
13



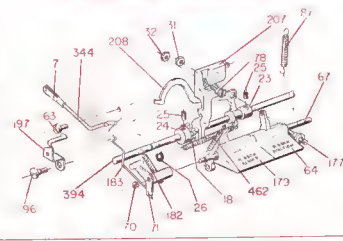
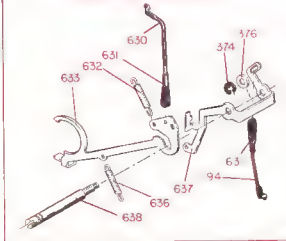
318-CLUTCH ASSEMBLY B/M
555-F1 B/M TO CONVERT EARLY
LEVEL FABRIC RIBBON OR
CARBON RIBBON TO POSITIVE
DRIVE FABRIC RIBBON

576-INTERMEDIATE GEAR ASM
625-B/M GUARD, GEAR

FAB RIBBON DRIVE LEVEL 2

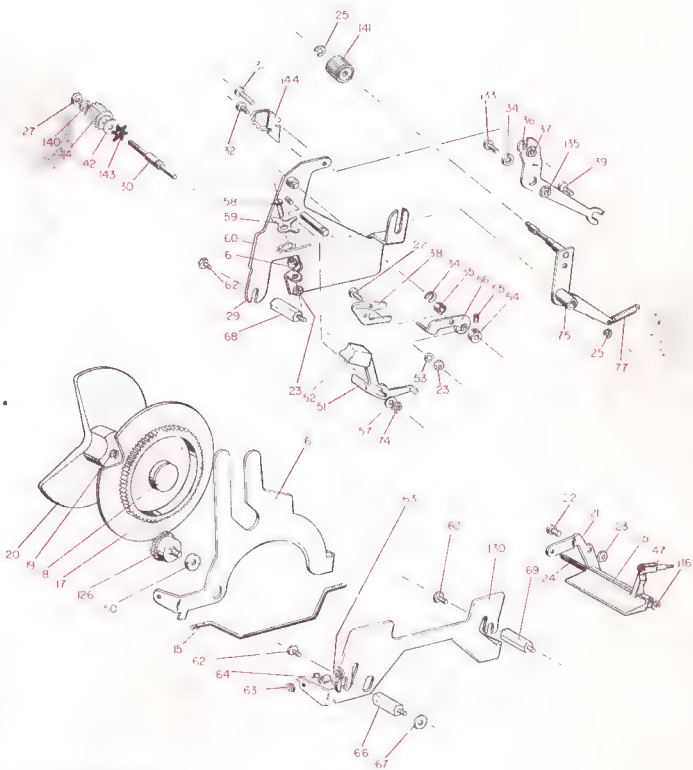
TAB RIBBON REWIND LEVER LEVEL 2

MODEL C POSITIVE DRIVE MECHANISM



CARBON RIBBON MODEL C1 & C4

MECH. CODE
14

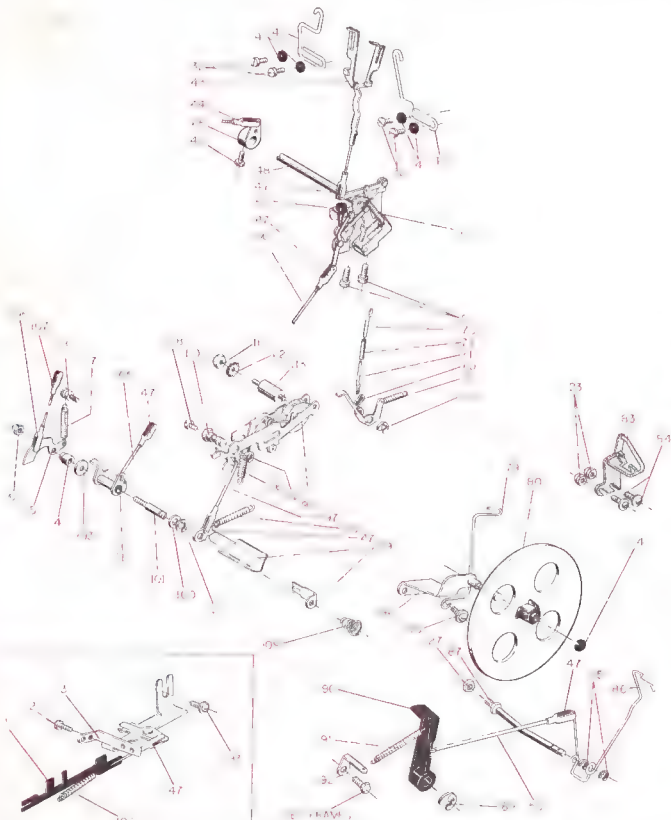


125-PLATE ASM UPPER FEED
128-PLATE ASM LOWER TAKE-UP
145-GEARED FEED ROLLER B/M

MECH. CODE

14

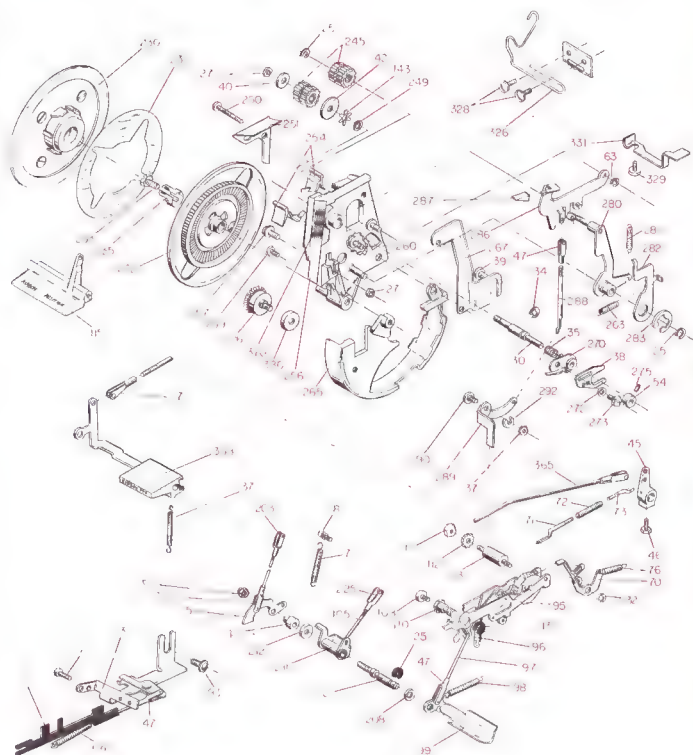
CARBON RIBBON MODEL C1 & C4



MECH. CODE

14

MODIFIED CARBON RIBBON

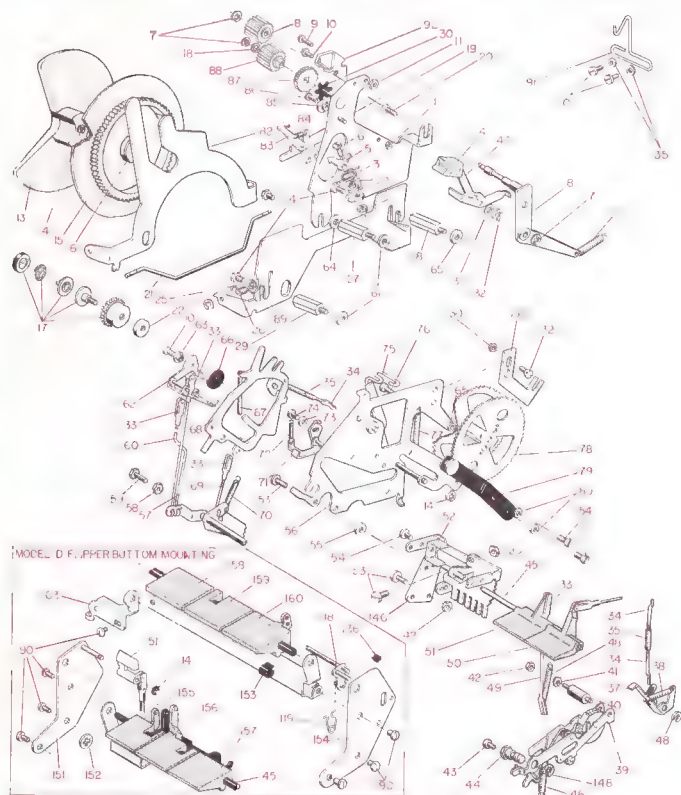


556-FEED & TAKE UP ASM

MECH. CODE

15

DUAL RIBBON

SEE FRAME SECTION FOR
DUAL RIBBON SIDE FRAMES93-L H FABRIC RIBBON
SIDE PLATE ASM

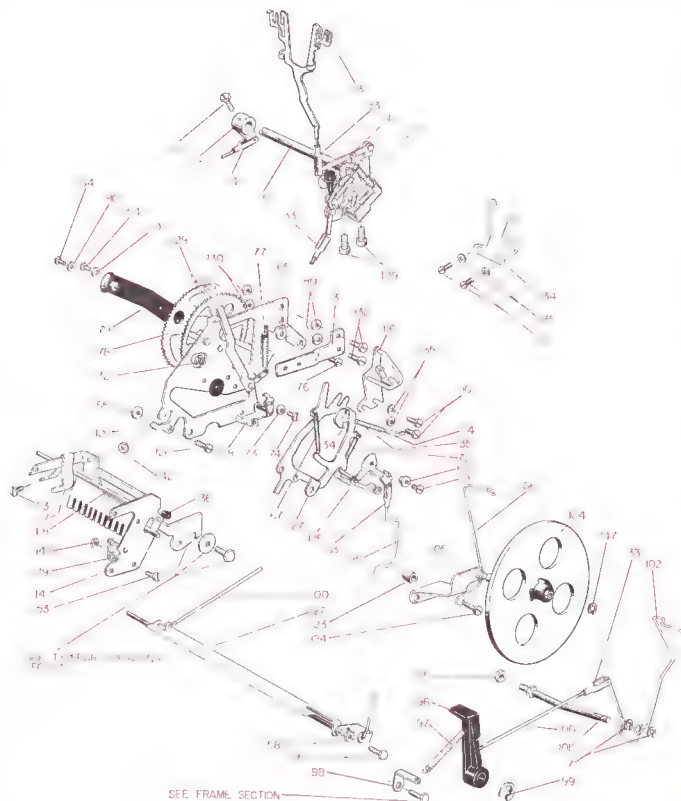
146-PLATE ASM

94-L H CARBON RIBBON
SIDE PLATE B
FLANGE ASM150-L H CARBON RIBBON
TAKE-UP PLATE ASM
LOWER

MECH. CODE

15

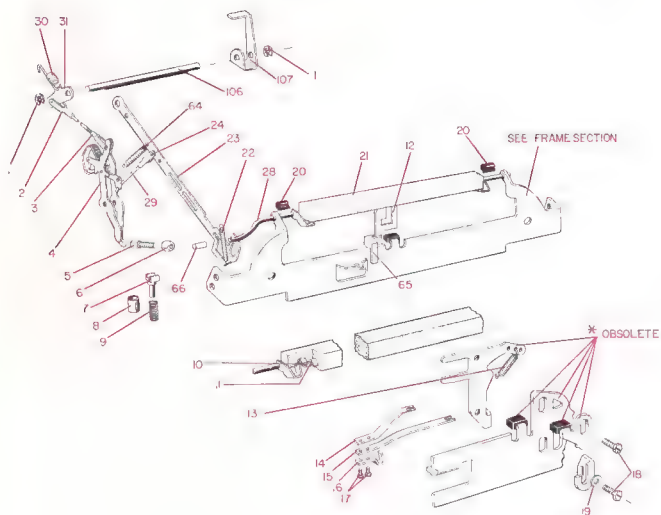
DUAL RIBBON



SEE FRAME SECTION

MECH. CODE

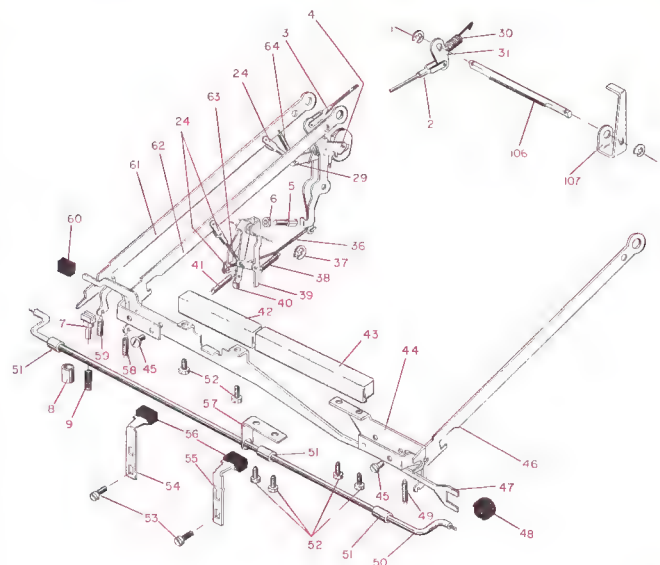
17

SPACEBAR
MODEL C1

32-B/M FOR MODIFIED SPACEBAR
 * WHEN REPLACING THESE PARTS ON
 THE OLD STYLE SPACEBAR STEM
 IT IS NECESSARY TO REPLACE REF
 NOS 7, 9, 12, & 21

MECH. CODE

17

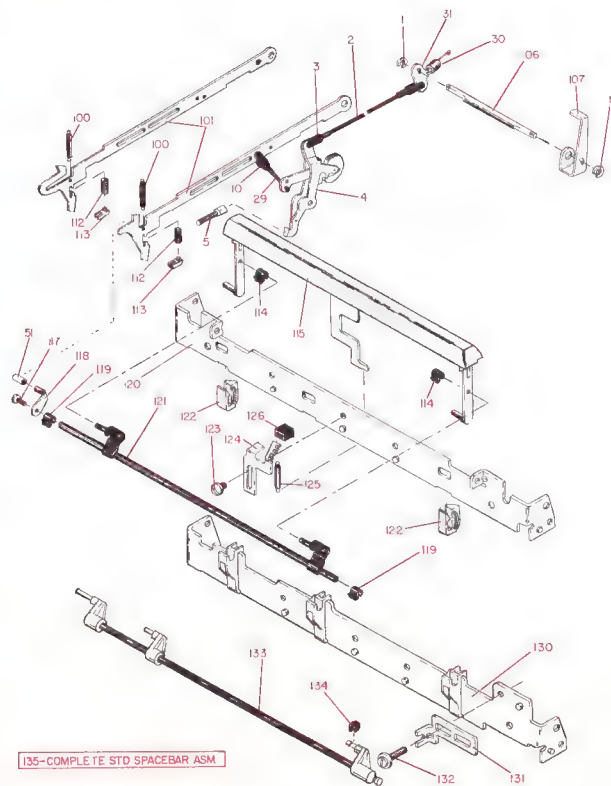
SPACEBAR
MODEL C4

SEE TYPEBAR OPERATING FOR
 CAM FULCRUM WIRE
 SEE FRAME SECTION FOR CAM
 STOP BRACKET

SPACEBAR
MODEL D1

MECH. CODE

17

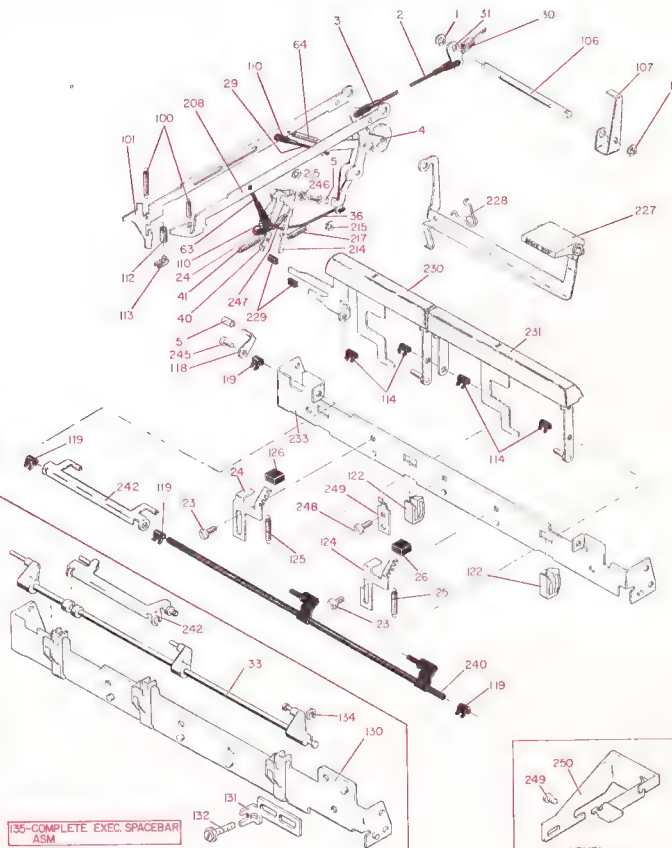


135-COMPLET STD SPACEBAR ASM

SPACEBAR
MODEL D4

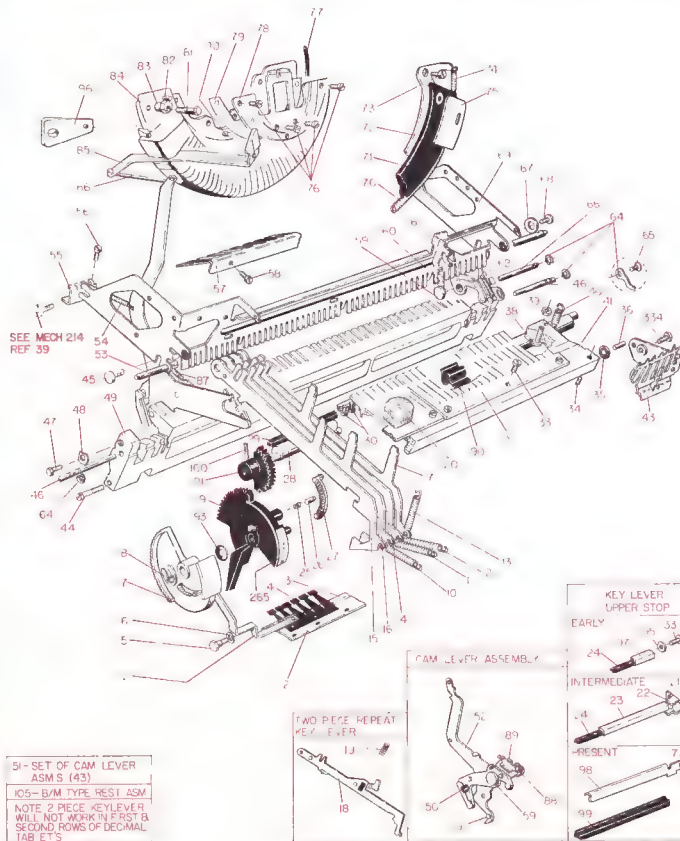
MECH. CODE

17

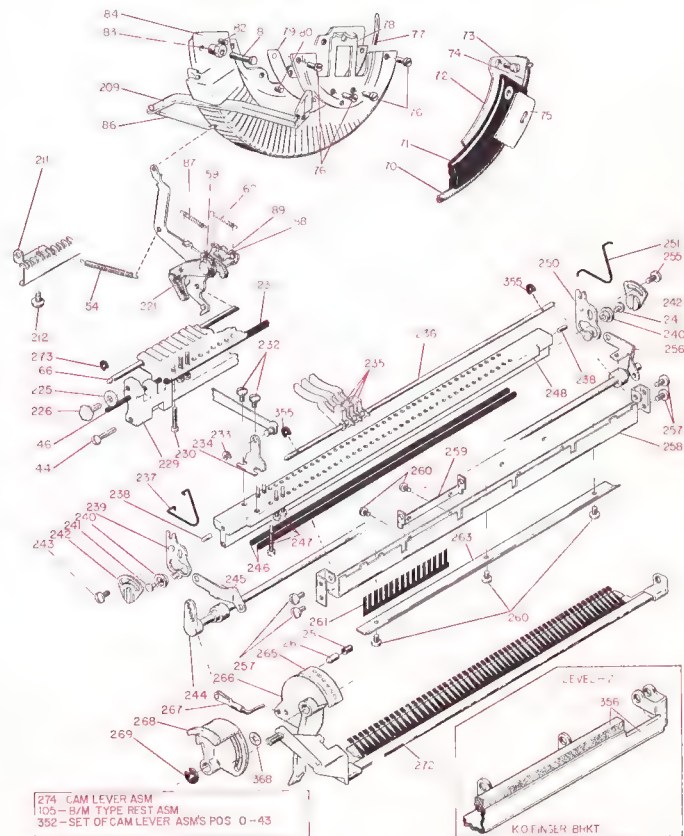
135-COMPLET EXEC SPACEBAR
ASM

LEVEL 1

TYPEBAR OPERATING MODEL C1 & C4

 MECH. CODE
19


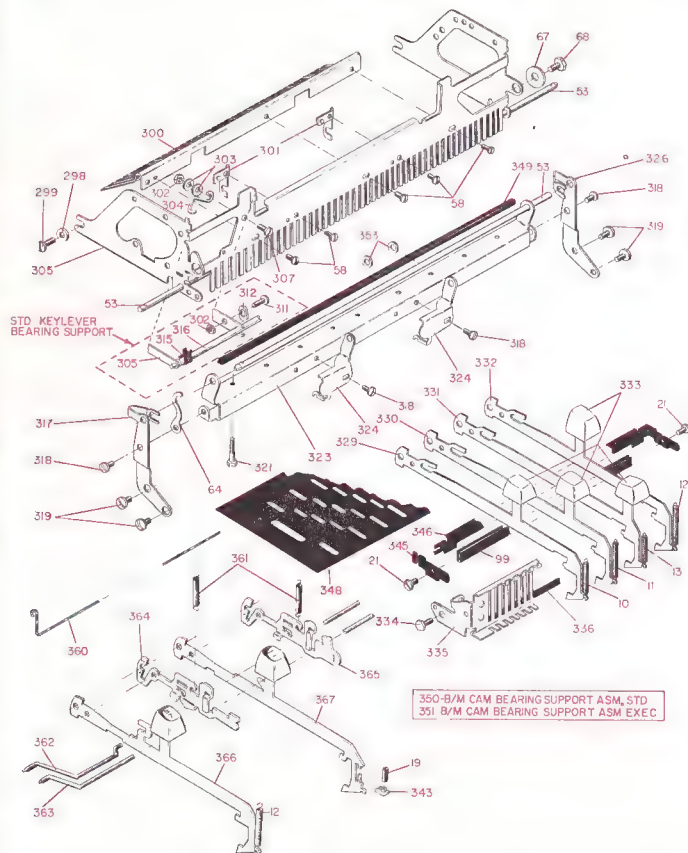
TYPEBAR OPERATING & DUAL KNOCK-OFF MODEL D1 & D4

 MECH. CODE
19


MECH. CODE

19

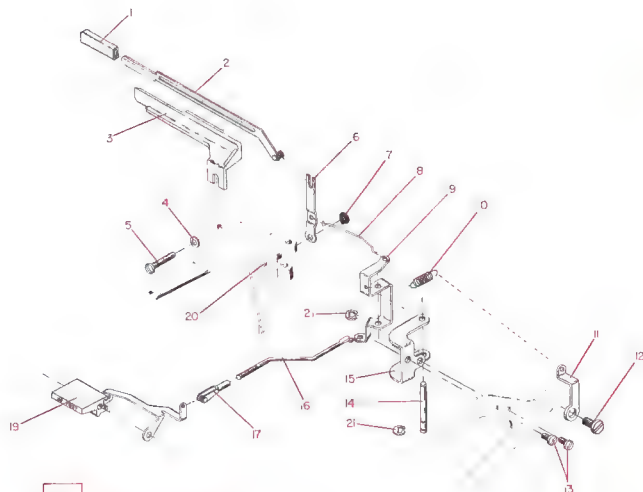
TYPEBAR OPERATING & DUAL KNOCK-OFF MODEL D1 & D4



MECH. CODE

20

NO PRINT MODEL D4



22-CENTERING GROMMET MODEL

DECIMAL TAB

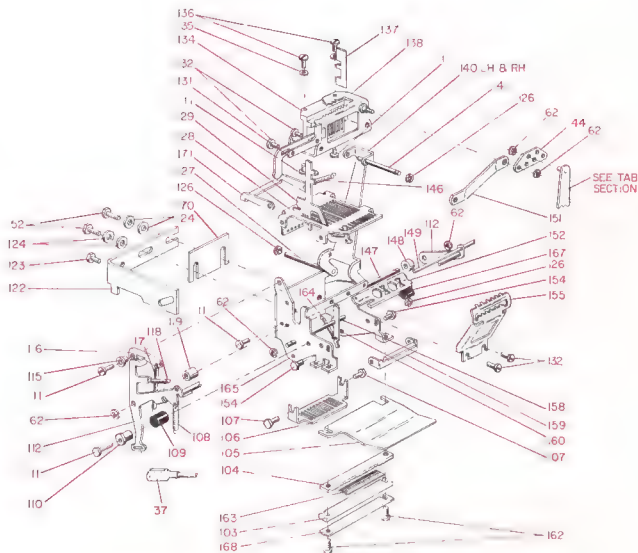
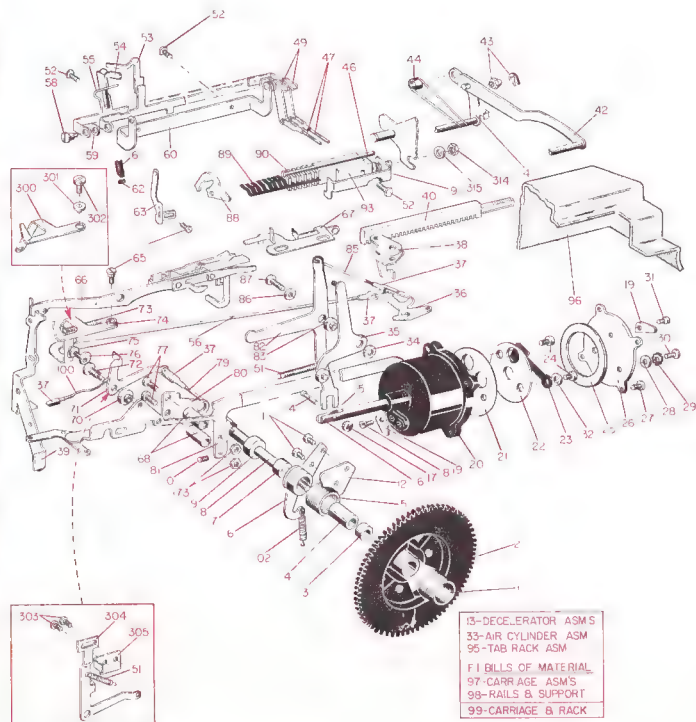
MECH. CODE

30

DECIMAL TAB

MECH. CODE

30

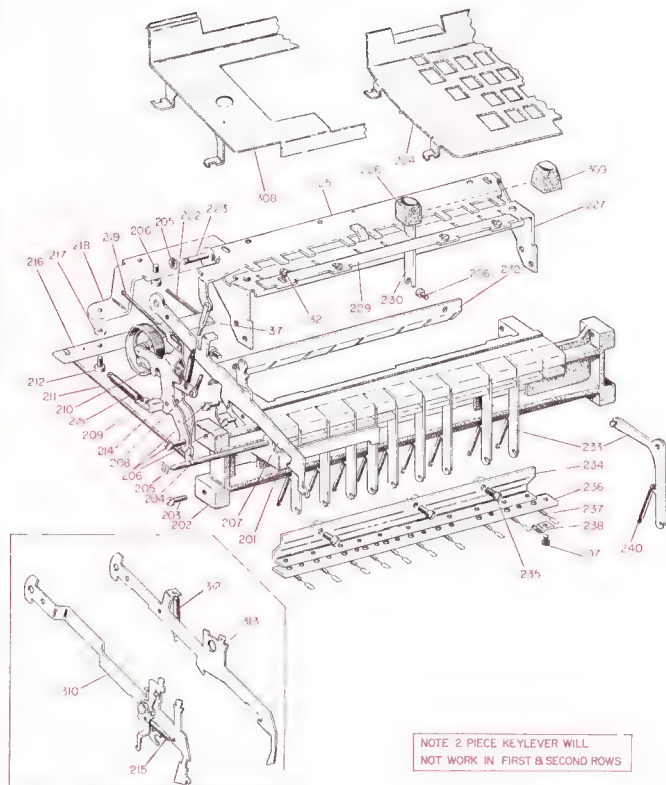


166-INTERPOSER ASM

MECH. CODE

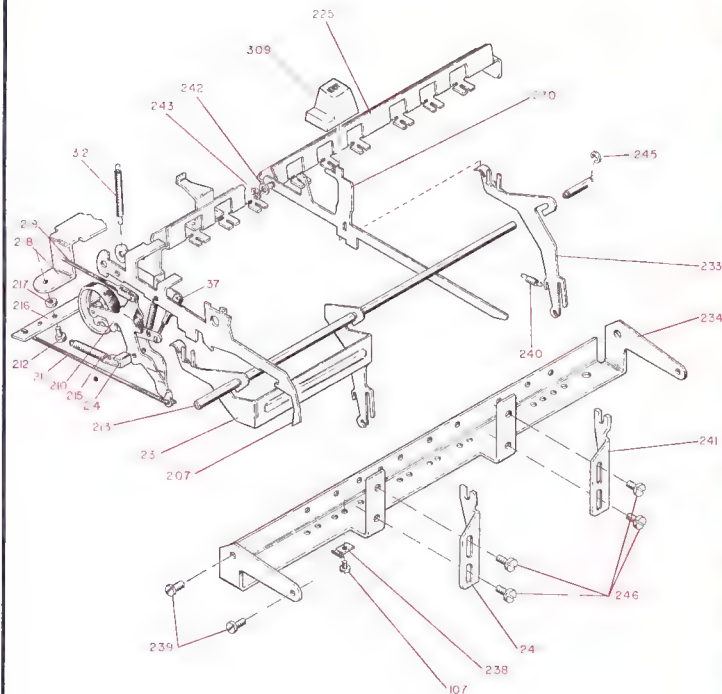
30

DECIMAL TAB

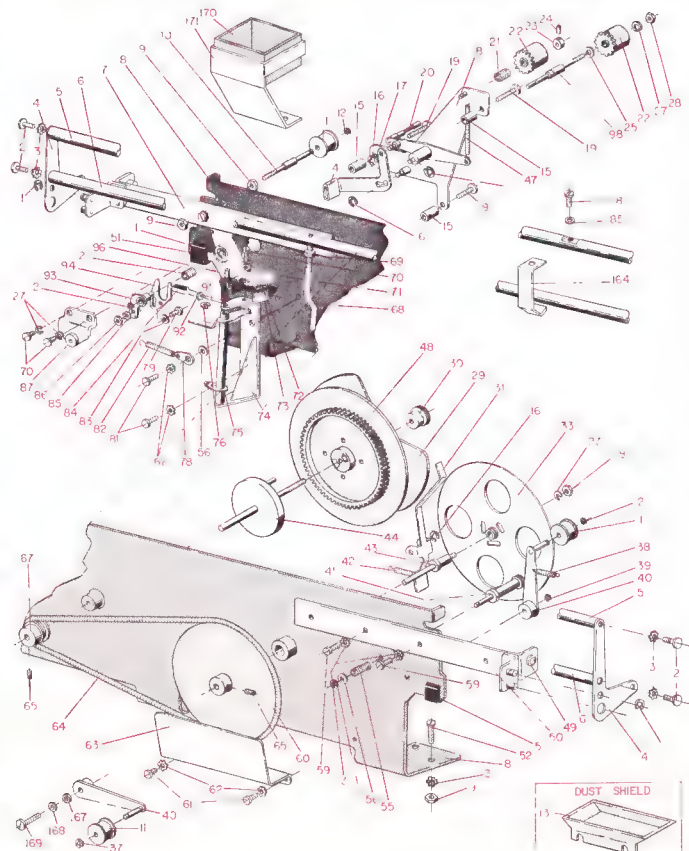


MECH. CODE

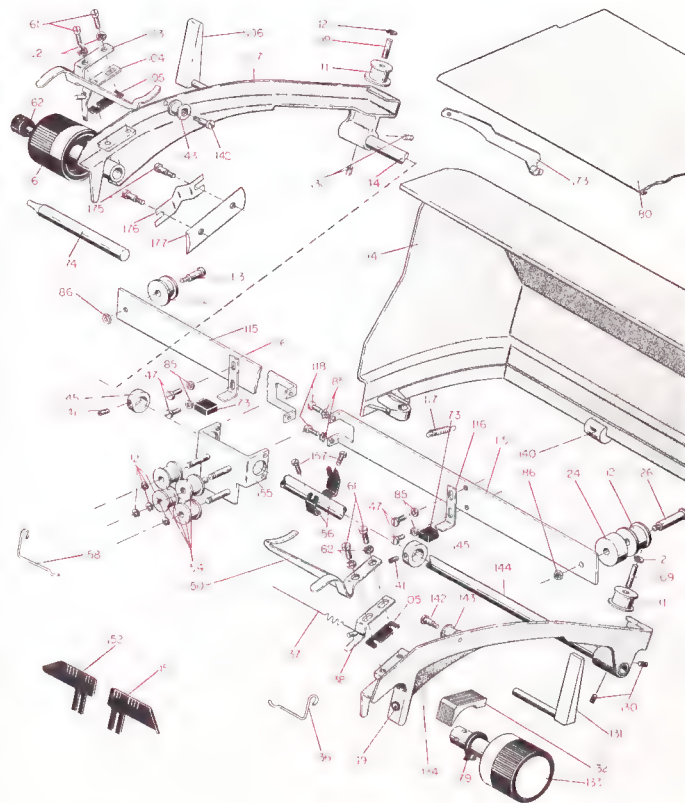
30

DECIMAL TAB CENTERED UNDERSCORE
MODEL D1

HEKTOWRITER

MECH. CODE
31

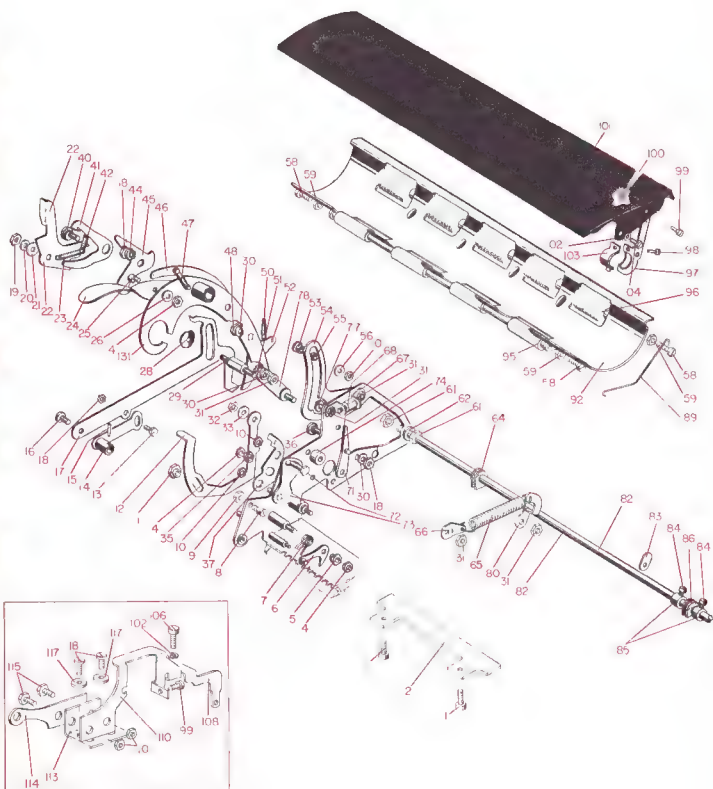
HEKTOWRITER

MECH. CODE
31

LP FORMSWRITER

MECH. CODE

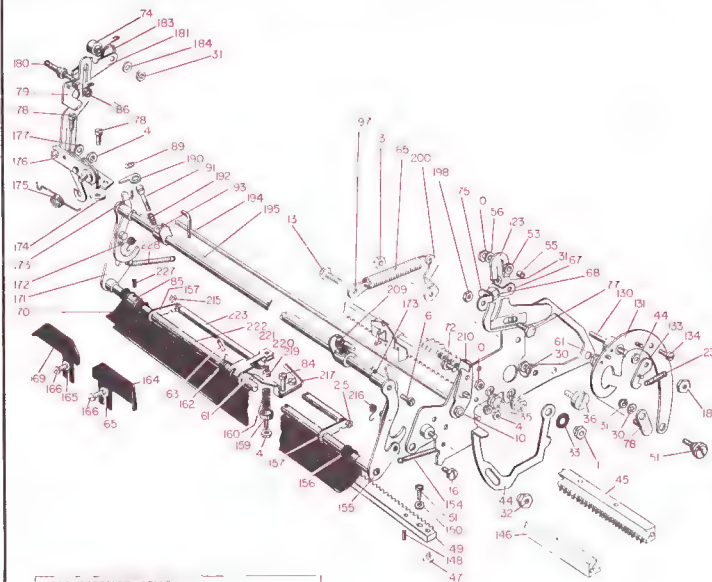
33



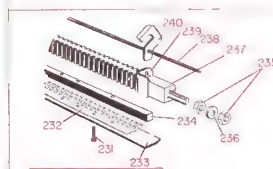
LP FORMSWRITER

MECH. CODE

33

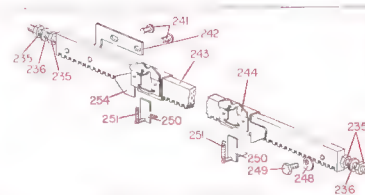


260 - CARRIAGE ASM'S
 261 - RAILS & SUPPORT
 262 - CARRIAGE & RACK
 267 - CARRIAGE TRUCK



230-TAB RACK ASMS

TAB RACK & COMPONENTS



MARG N RACK & COMPONENTS

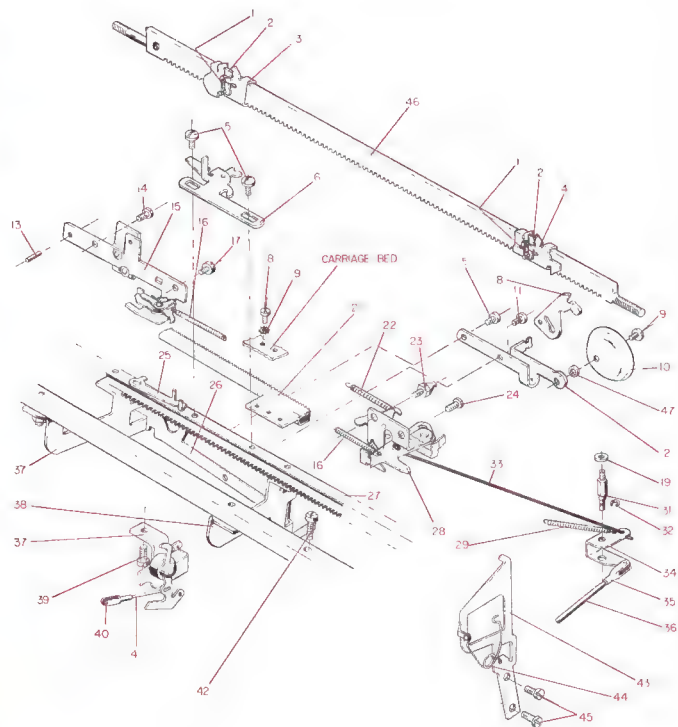
33

MECH. CODE

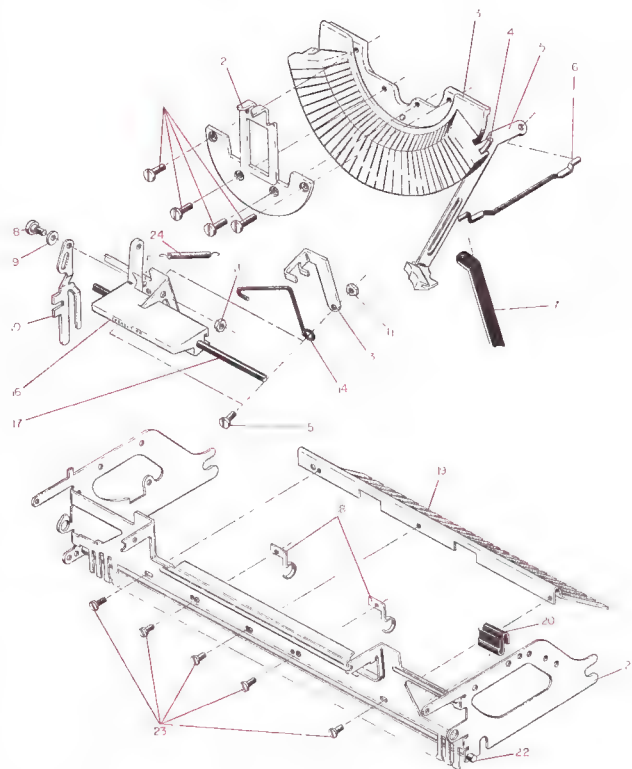
34

7 B/M... NE INDICATOR

BRAILLE RAILS & ESCAPEMENT

MECH. CODE
35

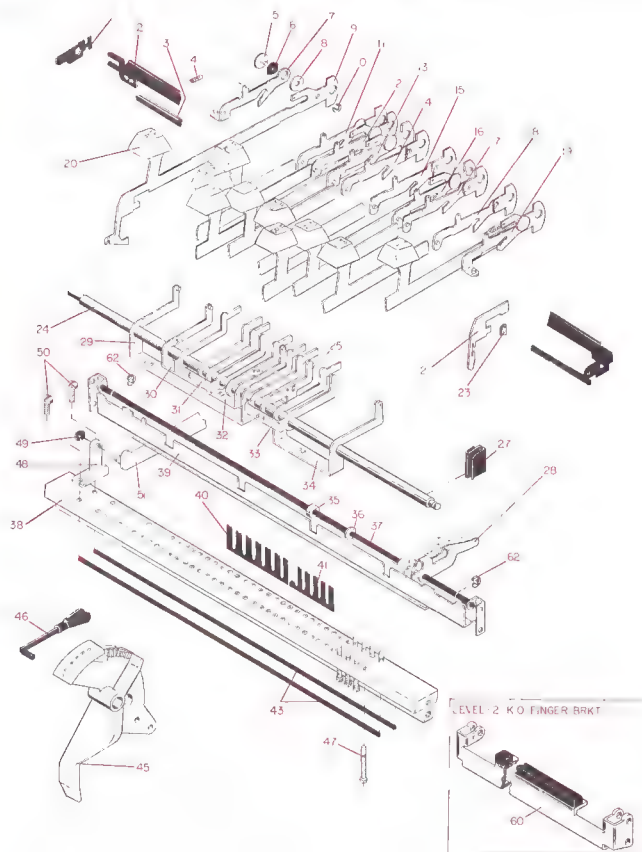
BRAILLE TYPEBAR

MECH. CODE
37

MECH. CODE

38

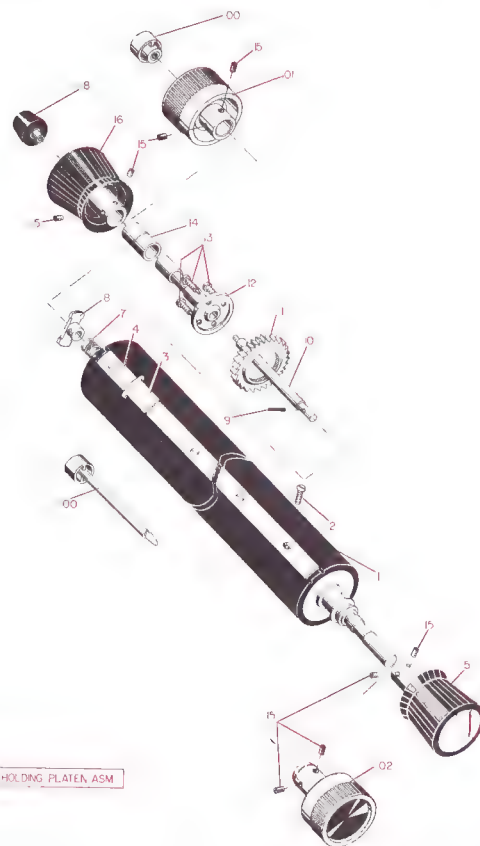
BRAILLE KEYBOARD



MECH. CODE

40

CARDHOLDING PLATEN

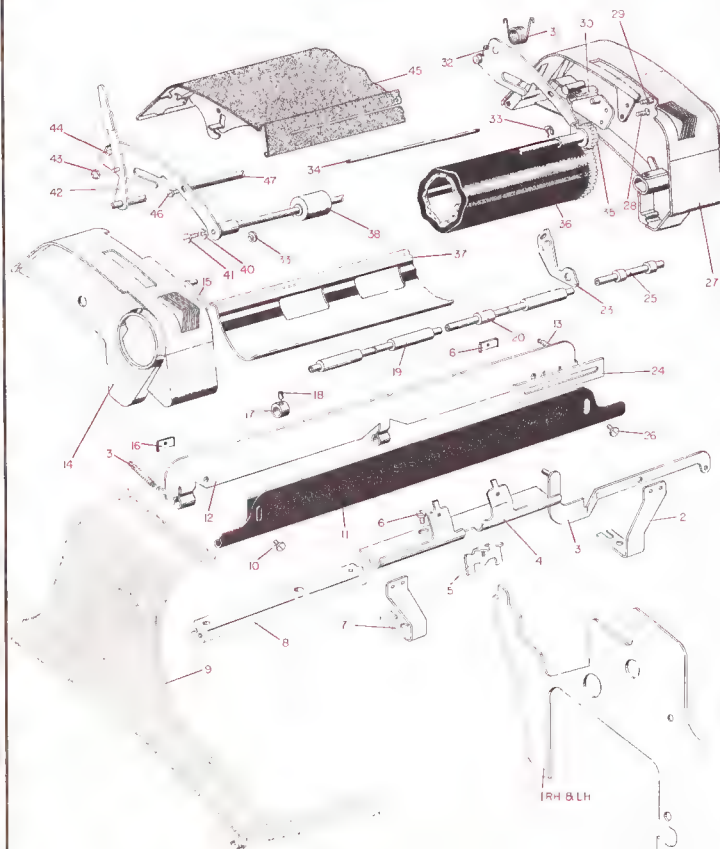


1 COMPLETE CARD-HOLDING PLATEN ASM

CHECKWRITER

MECH. CODE

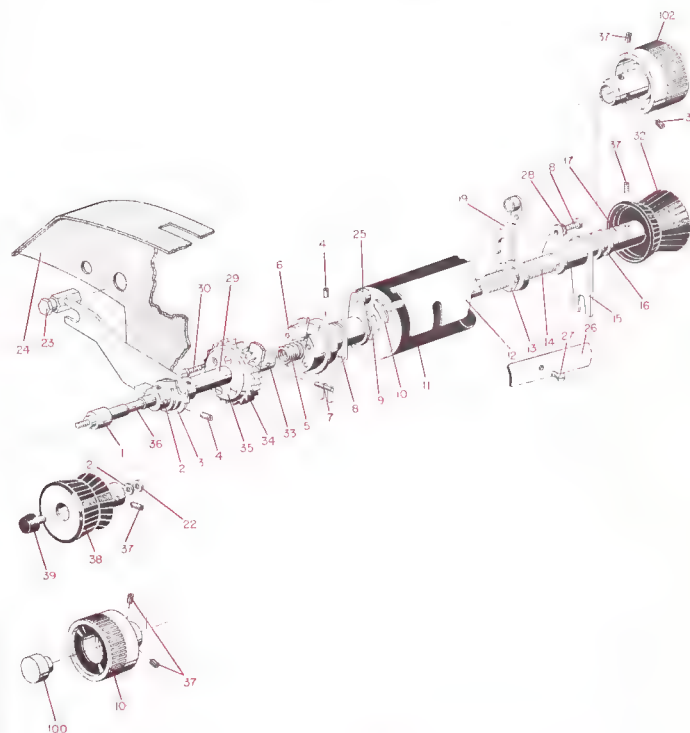
41



CLAMPTYPE WAYBILL

MECH. CODE

42

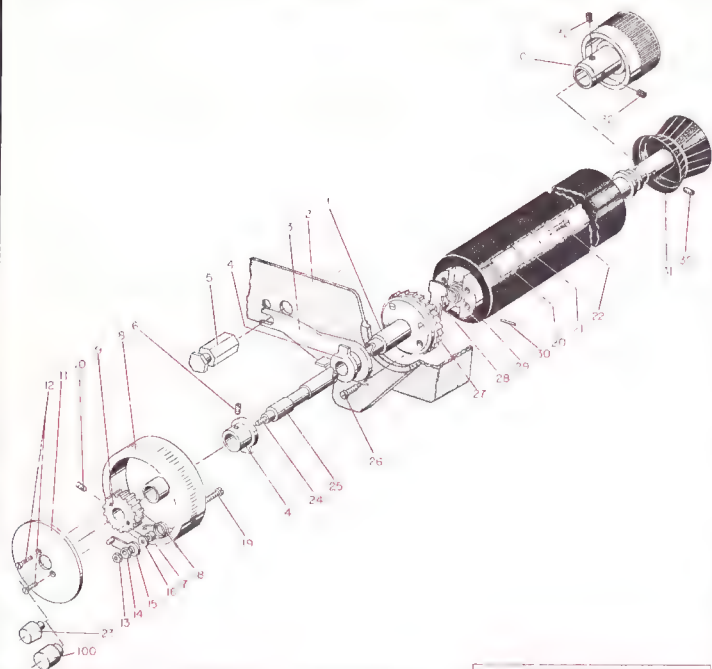


40-CLAMPTYPE WAYBILL PLATEN ASM

MECH. CODE

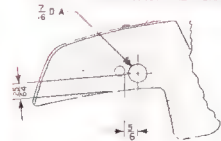
43

CARD POSITIONING PLATEN

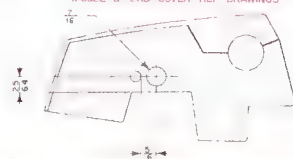


33-TAB CARD POSITIONING PLATEN ASM

MODEL C END COVER REF DRAWINGS



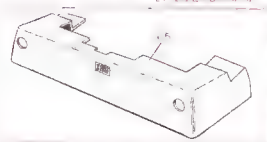
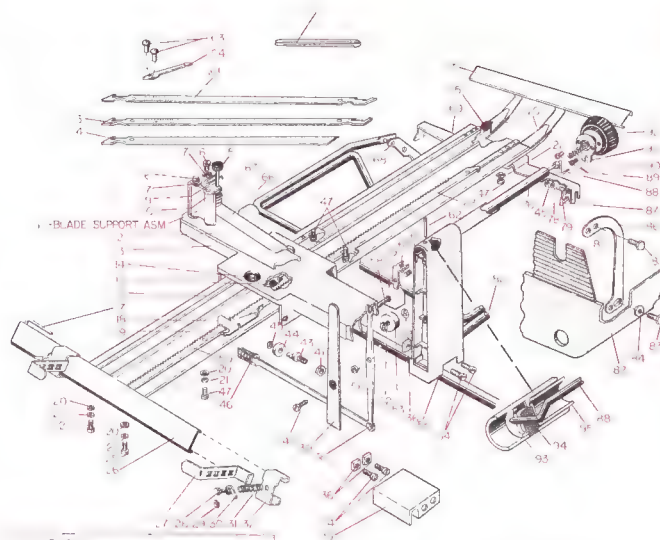
MODEL D END COVER REF DRAWINGS



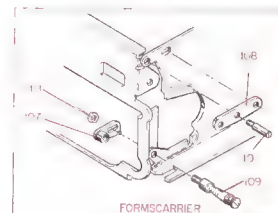
MECH. CODE

46

FORMSCARRIER

2 SLITTER BLADE ASM
47 FORMCARRIER ASM

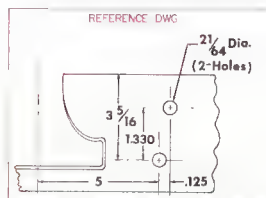
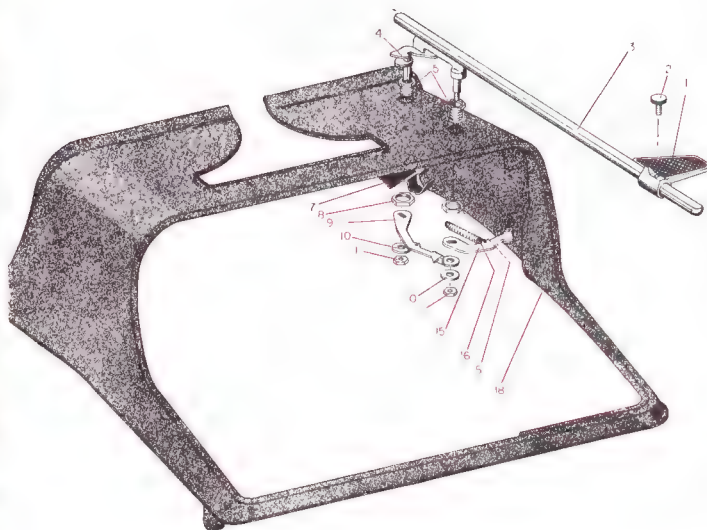
FORMS CARRIER PAINTED PARTS AVAILABLE IN GRAY
ONLY, OTHER COLORS MUST BE ORDERED ON S.E.R.



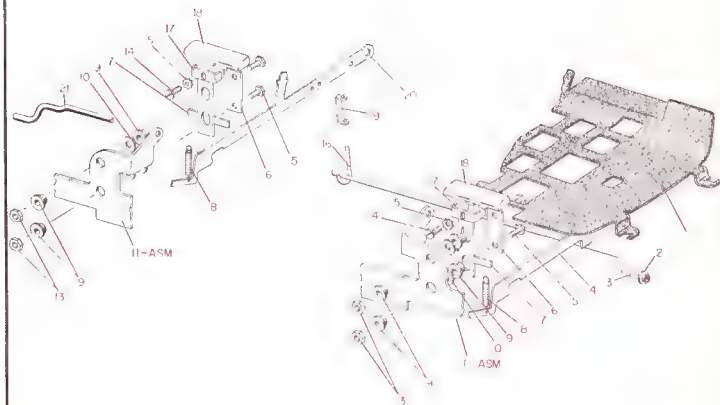
FORMCARRIER

LEADING EDGE GUAGE

MODEL C1 & C4

MECH. CODE
47

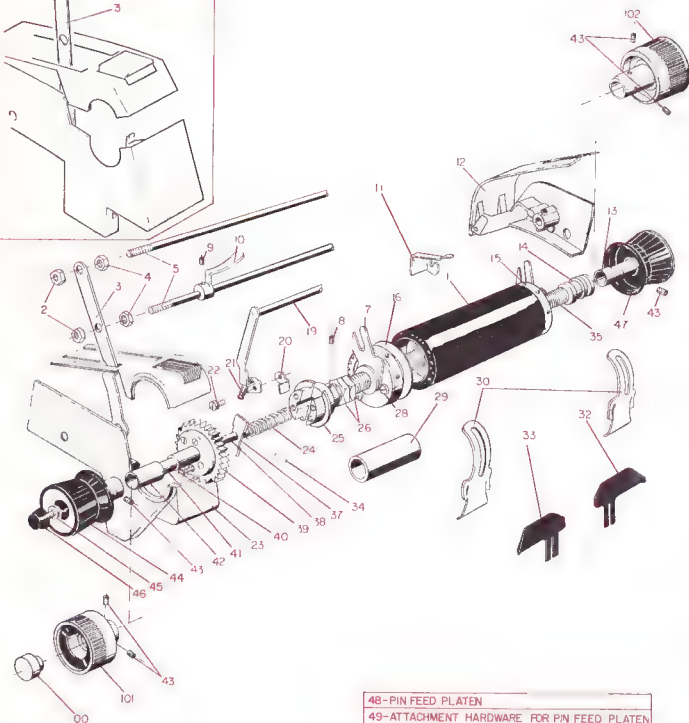
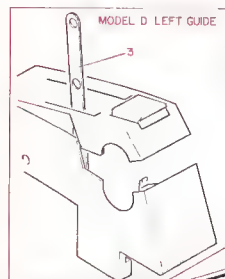
PALM TAB

MECH. CODE
48

MECH. CODE

49

PIN FEED PLATEN



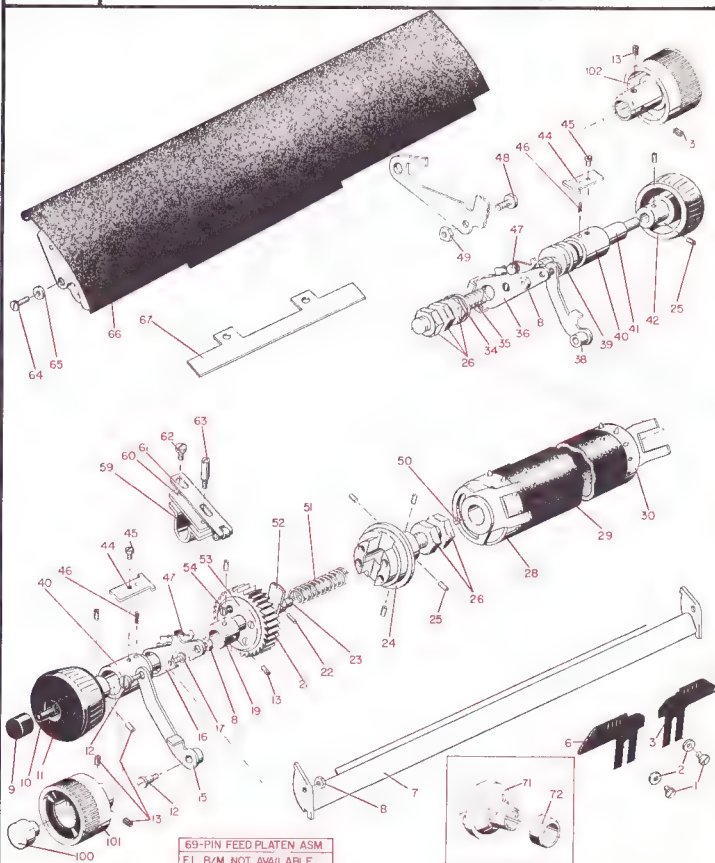
48-PIN FEED PLATEN

49-ATTACHMENT HARDWARE FOR PIN FEED PLATEN

MECH. CODE

50

PIN FEED LIFT PLATEN



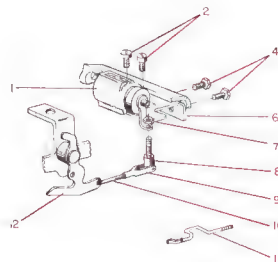
69-PIN FEED PLATEN ASM

F1 B/M NOT AVAILABLE

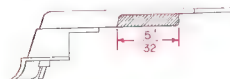
STROKE COUNTER

MECH. CODE

51

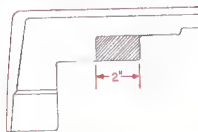


MODEL C



*SEE NOTE AT END OF LISTING

MODEL D



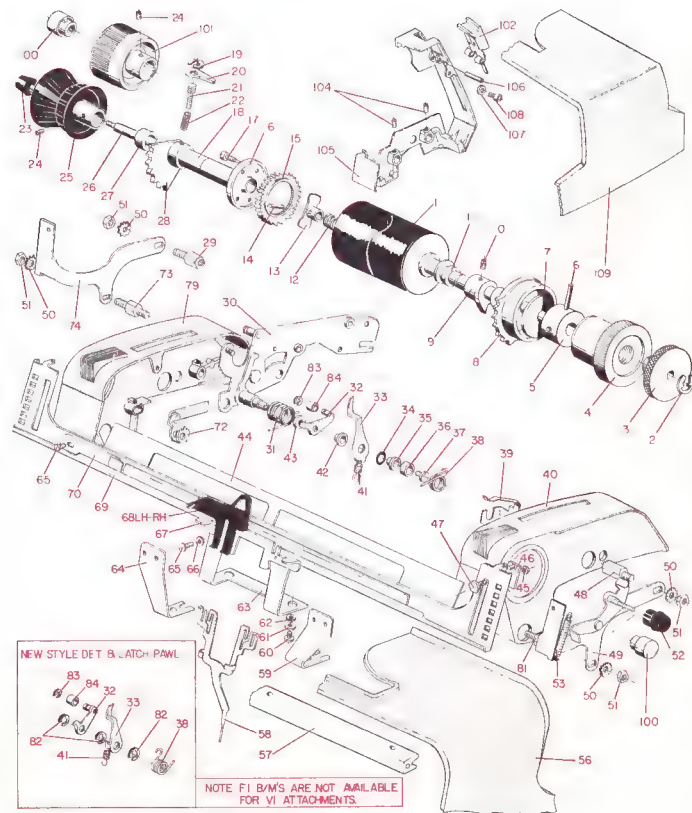
*SEE NOTE AT END OF LISTING

KEYSTROKE COUNTER PARTS FOR REPLACEMENT
ONLY-F.I. B/M NOT AVAILABLE

VISIBLE INDEX PLATEN

MECH. CODE

52

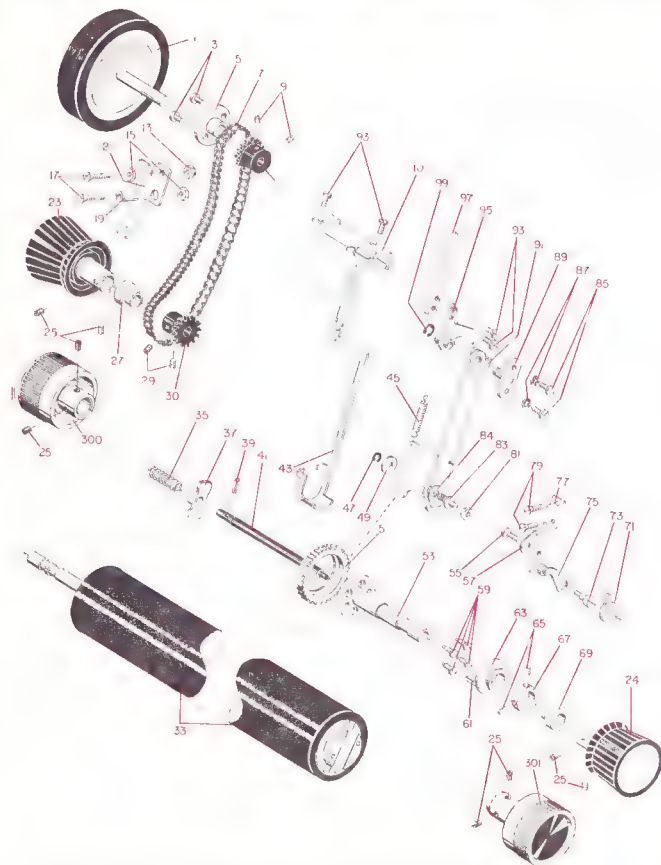


NOTE F.I. B/M'S ARE NOT AVAILABLE
FOR VI ATTACHMENTS.

MECH. CODE

54

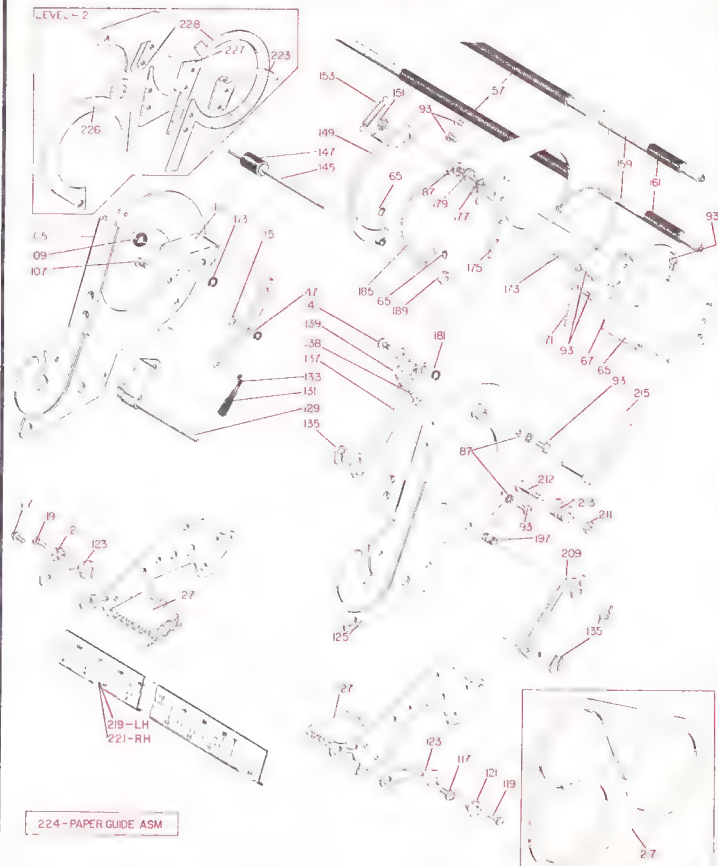
OPEN END CARRIAGE



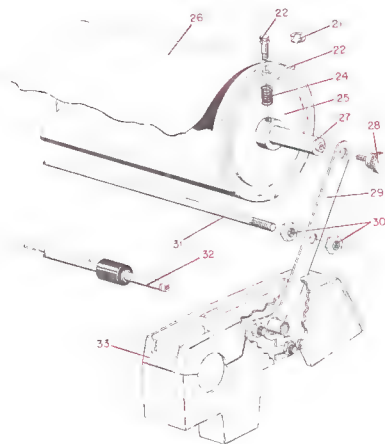
MECH. CODE

54

OPEN END CARRIAGE



HANDICAP ATTACHMENTS MODEL D1 & D4

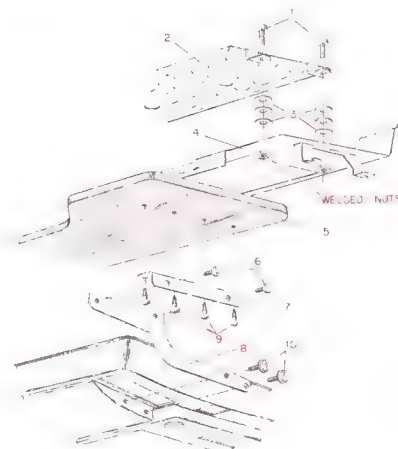
 MECH. CODE
60


INSTALLATION INSTRUCTIONS

Paper Holder

1. Remove and discard existing Right & Left Carriage End Covers.
2. Fasten Right & Left Upright Guides (Ref. 29) as shown.
3. Install Right & Left Carriage End Covers over Right & Left Upright Guides.
4. Place one Nut (Ref. 30) on each end of Stiffener Rod. Insert Stiffener Rod into Upright Guide and secure with Nuts (Ref. 30).
5. Assemble and install Paper Roll, Flanges, and Lock Screws and attach to Upright Guides with thumb screws.
6. Replace paper bail shaft with tear-off blade (Ref. 32).
7. Position Paper Roll Left to Right on Shaft for desired typing position.

HANDICAP ATTACHMENT MODEL D1 & D4

 MECH. CODE
60


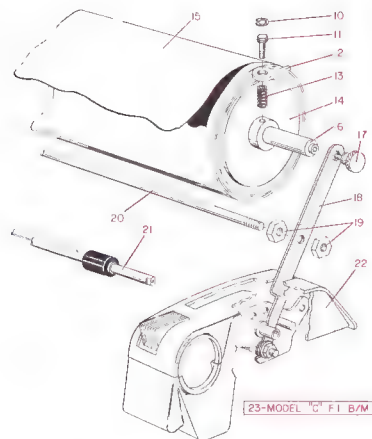
INSTALLATION INSTRUCTIONS

Arm Rest

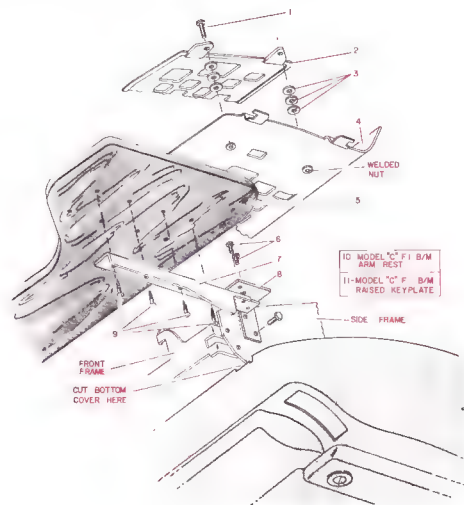
1. Fasten Keyboard rest to Mounting Supports (Ref. 7) with eight wood screws.
2. Install Right & Left Arm Rest Brackets (Ref. 8) on the Mounting Supports.
3. Using the Arm Rest Assembly as a guide, drill four holes (use a number 33 size drill) in the Bottom Cover as shown in the illustration.
4. Secure the Keyboard Rest to the bottom Cover with self-tapping screws provided (Ref. 6).
5. Replace the Carriage Return button with one of the three buttons provided (Ref. 11).

Keyboard Rest

1. Remove existing Keyplate and replace with Lower Keyplate (Ref. 4).
2. Install Upper Keyplate (Ref. 2) using spacing Washers (Ref. 3) as required to obtain desired elevation.

MECH. CODE
61**HANDICAP ATTACHMENT**
MODEL C1 & C4**INSTALLATION INSTRUCTIONS****Paper Holder**

1. Remove and discard existing Right & Left Carriage End Covers.
2. Fasten Right & Left Upright Guides as shown.
3. Install Right & Left Carriage End Covers over Right & Left Upright Guides.
4. Place one Nut, Ref. 19, on each end of Stiffener Rod. Insert Stiffener Rod into Upright Guides & secure with Nuts, Ref. 19.
5. Assemble and install paper roll, Flanges, & Lock Screws and attach to upright guides with thumb screws.
6. Replace paper bail shaft with tear-off blade.
7. Position Paper Roll Left to Right on Shaft for desired typing position.

MECH. CODE
61**HANDICAP ATTACHMENT**
MODEL C1 & C4**INSTALLATION INSTRUCTIONS****Arm Rest**

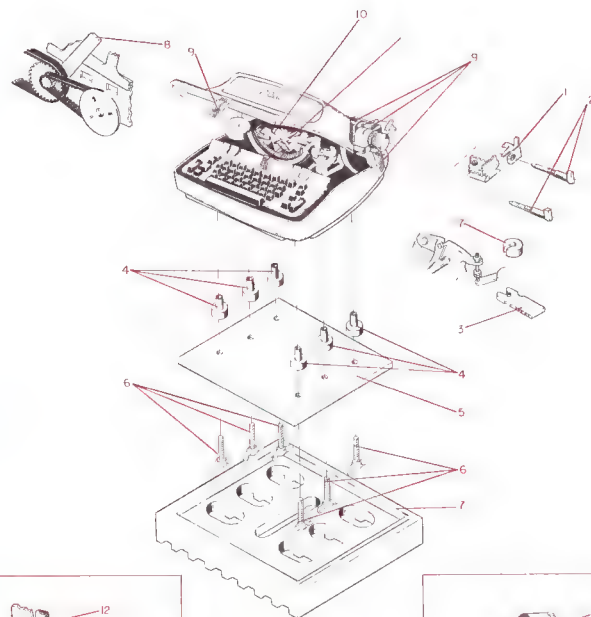
1. Fasten Keyboard Rest to Mounting Brackets (Ref. 7) with eight wood screws.
2. Remove Bottom Cover. Install Right & Left Brackets outside Side Frames with existing frame screws.
3. File Bottom Cover to fit around Right & Left Brackets in area shown and re-install cover.
4. Secure Keyboard Rest beneath Right & Left Brackets as shown.

Keyboard Rest

1. Remove existing Keyplate and replace with Lower Keyplate, Ref. 4.
2. Install Upper Keyplate, Ref. 2, using Spacing Washers, Ref. 3, as required to obtain desired elevation.

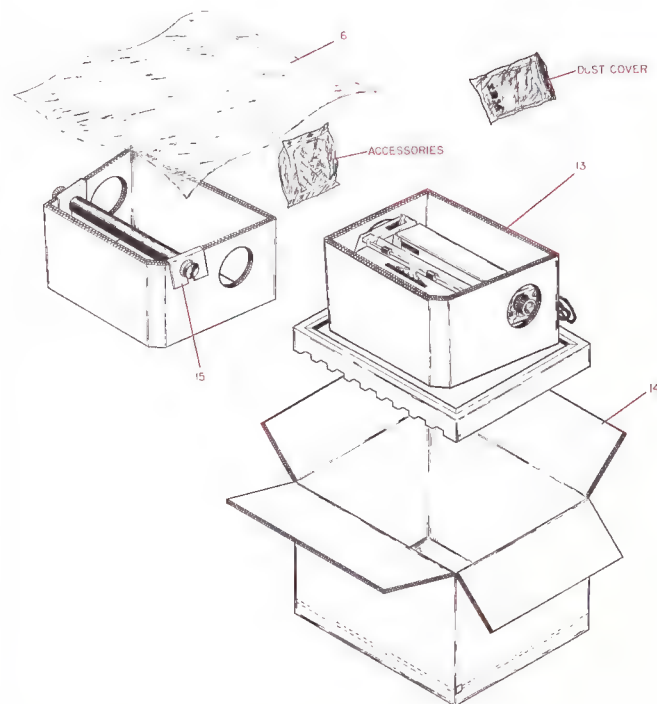
PACKING PARTS

MECH. CODE
65



PACKING PARTS

MECH. CODE
65



PACKING/UNPACKING PROCEDURES

PACKING PROCEDURE

- A. Tilt machine so it rests on rear of bottom cover, insert motor wedge 7340494 folded double at scoreline, on left end of motor as shown. Insert plastic spacers 7340206 (6) in bottom case. Place pallet over spacers, insert thumbscrews through pallet and tighten: middle screws first. Torque applied to thumbscrews 7340205 not to exceed 20 inch pounds.
- B. Place one inch strip of tape 7340090 one-half inch from end on top of rear rail on both sides. Grain of tape to run with length of rail. Center carriage on machine so rails are flush. Insert carriage bracket over carriage end plate at right rear and left rear of carriage as shown. Put end plug 7340743 through holes in brackets and push them between the rails. Put end plugs between the front rails on both sides of the machine.
- C. With basket raised, insert segment support cushion (2) on each side of machine. Insert belt retainer 7340494 between frame and pulley, using double thickness on fabric ribbon machines and single thickness on carbon ribbon machines. On carbon ribbon machine, secure ribbon pressure plate using a three to four inch piece of tape 7340090. Tape rear paper table on 23 and 29 inch Model D by applying tape from front paper scale across paper bail to the rear paper table approximately 6 inches in on 2 sides.
- D. Place rest pad spring retainer under rest pad by folding double at scoreline and slipping folded edge between rear of rest pad and selector bar guide. Place tissue paper in basket. Wrap tape under and over lip of cover and close cover. Seal loose end of tape to bottom cover. Tape rear cover to bottom cover on both sides of machine as shown on Model C only. Tape carriage end cover on both sides as shown on Model D only.
- E. Place foam tray in carton. Set palletized machine in tray. Cover machine with polyethylene sheet 7341223. Slip liner over machine. Place accessory pack and dust cover between liner and carton. Cord to be placed between liner and carton. Seal carton.
- F. On 23 and 29 inch machines, P/N 734083/, outer liner, is placed around assembly 7340544 front liner and 7340543 back liner.
- G. On 12.5 and 16 inch machines, when shipping extra platen, place platen in slots in liner and secure with retainer 7341085.

UNPACKING PROCEDURES

- A. Open carton by pulling tear tape completely around four sides; remove detached portion; lift out liner by spreading sides away from carriage ends; remove polyethylene sheet; lift machine out of tray.
- B. Tilt palletized machine on end so it rests on rear of bottom cover.
- C. Remove thumbscrews; by hand normally, but if screws are abnormally tight a silver dollar, 50 cent piece, or a strong pencil serves very well as a loosening device.
- D. Remove pallet board and plastic spacers. Remove bottom pan and pull out cardboard motor wedge located on left end of motor, set machine down and open top cover. Remove tape.
- E. Remove belt retainer wedge. Basket tissue paper. Type rest springs retainer and segment support cushions. On carbon ribbon machine, remove the tape from the ribbon pressure plate. For 17 inch machine, remove rail guards from basket and mounting.
- F. Remove end plugs by applying a slight pull while turning to right or left and pull out. Remove carriage brackets from carriage end plates. Remove tape from rear rails both sides.
- G. Machine is now ready for preinstallation checkout.

POLYESTER PAINTED COVERS - ALL COLORS

- NOTE:** A. Where Cover Parts for Special Machines are not listed, order Std. or Exec. parts as Appropriate.
- B. End Covers are complete. Other cover parts in this chart do not come with screws or supporting hardware

REAR COVER														
			Pearl White	Sapphire Blue	Emerald Green	Raven Black	Gray-Stone	Sdstone Beige	Topaz Bronze	Opal Gray	Garnet Rose	Onyx Blue	Classic Blue	Willow Green
	MECH.	REF.	P/N	P/N	P/N	P/N	P/N	P/N	P/N	P/N	P/N	P/N	P/N	P/N
Std & Exec	204	207	1268850	1268851	1268852	1268853	1268854	1268855	1268856	1268857	1268858	1268859	1231501	1231508
Dec. Tab	230	96	1268860	1268861	1268862	1268863	1268864	1268865	1268866	1268867	1268868	1268869	1231502	1231509
Formscarr	246	105	1268870	1268871	1268872	1268873	1268874	1268875	1268876	1268877	1268878	1268879	1231503	1231510
Std 30"	204	207	1268880	1268881	1268882	1268883	1268884	1268885	1268886	1268887	1268888	1268889	1231504	1231511
Dec. Tab 30"	230	96	1268890	1268891	1268892	1268893	1268894	1268895	1268896	1268897	1268898	1268899	1231505	1231512
Std. Stke Ctr	204	207	1268900	1268901	1268902	1268903	1268904	1268905	1268906	1268907	1268908	1268909	1231506	1231513
Dec. Tab. Stke Ctr.	230	96	1268910	1268911	1268912	1268913	1268914	1268915	1268916	1268917	1268918	1268919	1231507	1231514
30" Std Stke Ctr	204	207	1268920	1268921	1268922	1268923	1268924	1268925	1268926	1268927	1268928	1268929	1231516	1231520
30" Dec Tab Stke Ctr	230	96	1268930	1268931	1268932	1268933	1268934	1268935	1268936	1268937	1268938	1268939	1231515	1231519

FRONT COVER														
30"	204	209	1268940	1268941	1268942	1268943	1268944	1268945	1268946	1268947	1268948	1268949	1231517	1231521
All Except 30"	204	209	1268950	1268951	1268952	1268953	1268954	1268955	1268956	1268957	1268958	1268959	1231518	1231522

LH END COVER RAVEN BLACK			
TYPE	MECH.	REF.	P/N
Std	204	205	1268966
Ck. Writer	241	14	1268960
Ord. Pos. Pltn.	243	2	1268974
Pin Feed	249	23	1268982
Exec	204	205	1171306

RH END COVER RAVEN BLACK			
TYPE	MECH.	REF.	P/N
Std.	204	206	1268964
Ck. Writer	241	27	1268984
Pin Feed	249	12	1268980
Braille	204	206	1268962
Exec.	204	206	1171307

BOTTOM COVER RAVEN BLACK			
TYPE	MECH.	REF.	P/N
Std.	204	208	1268972
Exec.	204	208	1268970
Formscarr.	246	82	1268968
.....
.....

30" RAIL SUPP. RAVEN BLACK			
TYPE	MECH.	REF.	P/N
L/H	202	105	1268842
R/H	202	105	1268840
...
...

RAIL GUARD RAVEN BLACK			
SIZE	MECH.	REF.	P/N
20" & 24"	202	101	1268697
30"	202	101	1268997
.....
.....

REAR PAPER TBL. RAVEN BLACK			
SIZE	MECH.	REF.	P/N
13"	202	303	1268986
17"	202	303	1268988
20"	202	303	1268990
24"	202	303	1268992
30"	202	303	1268994

LH END COVER ONYX BLUE			
TYPE	MECH.	REF.	P/N
Std	204	205	1268967
Ck. Writer	241	14	1268961
Ord. Pos. Pltn.	243	2	1268975
Pin Feed	249	23	1268983
Exec.	204	205	1171306

RH END COVER ONYX BLUE			
TYPE	MECH.	REF.	P/N
Std.	204	206	1268965
Ck. Writer	241	27	1268985
Pin Feed	249	12	1268981
Braille	204	206	1268963
Exec.	204	206	1171307

BOTTOM COVER ONYX BLUE			
TYPE	MECH.	REF.	P/N
Std.	204	208	1268973
Exec.	204	208	1268971
Formscarr.	246	82	1268969
.....
.....

30" RAIL SUPP. ONYX BLUE			
TYPE	MECH.	REF.	P/N
L/H	202	105	1268844
R/H	202	105	1268838
...
...

RAIL GUARD ONYX BLUE			
SIZE	MECH.	REF.	P/N
20" & 24"	202	101	1268698
30"	202	101	1268998
.....
.....

REAR PAPER TBL. ONYX BLUE			
SIZE	MECH.	REF.	P/N
13"	202	303	1268987
17"	202	303	1268989
20"	202	303	1268991
24"	202	303	1268993
30"	202	303	1268836

PLATEN INDEXING CHART

PLATEN RATCHET P/N'S					DETENT LEVER POSITIONS				DETENT P/N'S			DETENT SPRINGS			INDEX PAWLS			UPPER INDEX ** PAWL STOP		LINE SPACE LEVERS					
No of Teeth	Model A	Model B Universal	Model C Old Style	Late C Model D	1 pos Teeth Index	2 pos Teeth Index	3 pos Teeth Index	Teeth Index	Mod A	Mod B	Mod C&D Roller	Mod A	Mod B	Mod C Mod D	Mod A	Mod B	Mod C Mod D	Mod A	Mod B	Mod C	Mod. D Std.	Mod. D Exec.	Stamp No		
52	-----	1104052	-----	1155152	43.3	2	23.7	4	15.8	6	-----	1103634	-----	-----	1103637	-----	-----	1107452	-----	-----	1103611	-----	-----	---	
53	1002253	1104053	1117153	1155153	48.2	2	32.1	3	24.1	4	1076884	1103634	1000363	1072479	1103637	1115646	1076862	1107452	1107452	1002272	1103606	1115690	1171661	1171678	10
54	-----	1104054	1117154	1155154	49.1	2	24.6	4	16.4	6	-----	1103634	1000363	-----	1103637	1115646	-----	1107452	1107452	-----	1103611	1115691	1171662	1171679	11
55	1002255	1104055	1117155	1155155	50.0	2	33.3	3	25.0	4	1076886	1103634	1000363	1072479	1103637	1115646	1076862	1107452	1107452	1002272	1103606	1115690	1171661	1171678	10
56	1002256	1261956	1117156	1155156	50.9	2	34.0	3	25.5	4	1076884	1103634	1000363	1072479	1103637	1115646	1076862	1107452	1107452	1002272	1103607	1115691	-----	-----	11
56	-----	1261956	-----	1155156	50.9	2	25.5	4	17.0	6	-----	1103634	-----	-----	1103637	-----	-----	1107452	-----	-----	1103612	-----	-----	---	
57	1002257	1104057	1117157	1155157	51.8	2	34.6	3	25.9	4	1076884	1103634	1000363	1072479	1103637	1115646	1076862	1107452	1107452	1002272	1103607	1115692	1171663	1171680	12
58	1002258	1104058	1117158	1155158	52.8	2	35.2	3	26.4	4	1076886	1103634	1000363	1072479	1103637	1115646	1076862	1107452	1107452	1002272	1103607	1115692	1171663	1171680	12
58	-----	1104058	1117158	1155158	52.8	2	26.4	4	17.6	6	-----	1103634	1000363	-----	1103637	1115646	-----	1107452	1107452	-----	1103612	1115693	1171664	1171681	13
59	1002259	1104059	1117159	1155159	53.7	2	35.8	3	26.8	4	1076886	1103634	1000363	1072479	1103637	1115646	1076862	1107452	1107452	1002273	1103607	1115692	1171663	1171680	12
60	1002260	1104060	1117160	1155160	54.6	2	36.4	3	27.3	4	1076886	1103634	1000363	1072479	1103637	1115646	1076862	1107452	1107452	1002275	1103608	1115694	1171665	1171682	14
60	-----	1104060	1117160	1155160	54.6	2	27.3	4	18.2	6	-----	1103634	1000363	-----	1103637	1115646	-----	1107452	1107452	-----	1103613	1115681	1171652	1171669	1
61	1002261	1104061	1117161	1155161	55.5	2	37.0	3	27.7	4	1076884	1103634	1000363	1072479	1103637	1115646	1076862	1107452	1107452	1002273	1103608	1115694	1171665	1171682	14
62	1002262	1104062	1117162	1155162	56.4	2	37.6	3	28.2	4	1076884	1103634	1000363	1072479	1103637	1115646	1076862	1107452	1107452	1002273	1103608	1115694	1171665	1171682	14
62	-----	1104062	1117162	1155162	56.4	2	28.2	4	18.8	6	-----	1103634	1000363	-----	1103637	1115646	-----	1107452	1107452	-----	1103613	1115691	1171662	1171679	11
63	-----	1104063	-----	-----	57.3	2	38.2	3	28.7	4	-----	1103634	-----	-----	1103637	-----	-----	1107452	-----	-----	1103608	-----	-----	---	
64	-----	-----	-----	1155164	58.2	2	38.8	3	29.1	4	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	---		
64	-----	-----	-----	1155164	58.2	2	29.1	4	19.4	6	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	---		
65	-----	-----	-----	-----	59.1	2	39.4	3	29.6	4	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	---		
66	1002266	1104066	1117166	1155166	60.0	2	40.0	3	30.0	4	1076884	1103634	1000363	1072479	1103637	1115646	1076862	1107452	1107452	1002273	1103609	1115695	1171666	1171683	15
66	-----	1104066	1117166	1155166	60.0	2	30.0	4	20.0	6	-----	1103634	1000363	-----	1103637	1115646	-----	1107452	1107452	-----	1103614	1115693	1171664	1171681	13

*Detent Arm P/N	Stamp
1076864	29
1076880	31
1072875	Unstamped
1076882	45
1076886	55
1076884	62

** Pawl Stop P/N	Stamp
1076865	29
1000325	Unstamped
1076866	45
1002272	55
1002273	62

CALL PREVENTION PROCEDURE
MODEL C AND D TYPEWRITER

- A. *Note operator's comments
- B. *Functionally check machine
- C. Remove covers
- D. *Clean rubber parts, cardholder, segment and type
- E. Lubrication
 - No. 2 Oil
 - 1. "Executive" interposers
 - 2. Decimal Tab interposers
 - No. 10 Oil
 - 1. All bearings and pivot points
 - 2. *Motor bearings and power roll bearings
 - 3. Fulcrum wires
 - 4. Cross-over bails at side frame pivot points
 - No. 23 Grease
 - 1. Decelerator clutch springs
 - 2. 1/2 space camming lever surface
 - 3. Intermediate pulley
 - 4. Motor pulley teeth
 - 5. Motor shaft
 - 6. Shift toggle springs
 - 7. Spacebar actuating lever — keylever contact point
 - 8. Knockoff finger channels
 - 9. T-bar studs and roller
 - 10. Primary keylever cross-over bail hooks
 - 11. Auxiliary keylever cross-over bail hooks

- F. Planned parts replacement
- G. *Electrical safety check
- H. Call prevention machine check
 - 1. Carriage and rails
 - a. Levers (operation — loose setscrews)
 - b. Trucks (carriage movement)
 - c. Feed rolls (binds — end play)
 - d. Racks (loose nuts and screws)
 - e. Rear rail (loose screws)
 - f. *Repositioning indicator and expand
 - 2. Under machine
 - a. Cam clearance (all cams)
 - b. Decelerator cam arms (binds)
 - c. Governor pinion (should have some backlash)
 - 3. Functional features
 - a. Tab (short and long), check set and clear
 - b. *Shift (ensure that basket restores reliably, check lock)
 - c. Spacebar (binds — "power off," check for escapement trip)
 - d. *Carriage return (unlatching point, tension)
 - e. Backspace
 - f. Backspace/carriage return and tab/carriage return (simultaneous)
 - g. Margin set and release
 - h. Linelock (standard)
 - i. Escapement trip (typebar)

- 4. Ribbon
 - a. *Feed
 - b. Tracking (characters on ribbon)
 - c. Guides (alignment)
 - d. Fabric rewind and reverse (check for backlash)
- 5. Typebar operating (4-way simultaneously check)
 - a. Type strike-up and simultaneously check for:
 - 1. Binding keylever or keybuttons
 - 2. "Bottoming-out" and trip lever reset
 - 3. Catching of adjacent typebars or cam levers
 - 4. Alignment, impression and motion problems

* Every call.



International Business Machines Corporation
Office Products Division
Customer Engineering